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1974 Supplement

U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

Properties of Selected Superconductive Materials

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Properties of Selected Superconductive Materials—1974 Supplement

B. W. Roberts

Superconductive Materials Data Center
General Electric Research and Development Center
P. O. Box 8, Schenectady, N.Y. 12301

(Extends NBS Technical Note 724)

U.S. DEPARTMENT OF COMMERCE, Frederick B. Dent, *Secretary*
NATIONAL BUREAU OF STANDARDS, Richard W. Roberts, *Director*

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PROPERTIES OF SELECTED SUPERCONDUCTIVE MATERIALS†

SUPPLEMENT, 1974

B.W. Roberts

This report includes data on additional superconductive materials extracted from a portion of the world literature up to mid-1973. The data presented are new values and have not been selected or compared to values (except for selected values of the elements) previously assembled by the Superconductive Materials Data Center. The properties included are composition, critical temperature, critical magnetic field, crystal structure and the results of negative experiments. Special tabulations of high magnetic field materials with Type II behavior and materials with organic components are included. All entries are keyed to the literature and a list of reviews centered on superconductive materials is included.

Key words: Bibliography; composition; critical fields; critical temperature; crystallographic data; data compilation; low temperature; superconductive materials; superconductivity.

INTRODUCTION

This Technical Note extends the data set on superconductive materials published in Progress in Cryogenics, Vol. IV, 1964, pp. 160-231*, and National Bureau of Standards Technical Notes 482 (Issued May 1969) and 724 (Issued June 1972). Because the world activity in the study of superconductive materials has continued at a high rate, several hundred references are in hand for future perusal and inclusion.

It is hoped that users of these data on superconductive materials will inform the author on needed corrections, deletions and additional information which may include heretofore unpublished results to be referenced under the contributor's name and institution.

BACKGROUND

Over sixty years of research on the phenomena of superconductivity has led to an impressive current world activity aimed at further understanding as well as technical and industrial utilization. This effort has produced a technology employed by many technical concerns. Some of the latest developments include superconductive coils capable of producing magnetic fields approaching 20 Tesla.** Superconductive magnets with precise and homogeneous fields and with selective spacial configurations which are readily produced including some field gradient patterns impossible to form with normal state conductors. Linear accelerators are planned utilizing superconductive cavity walls. Large superconductive magnets have been constructed for hydrogen bubble chambers with coil diameters on the order of 3 meters and more. Plasma researchers have constructed floating superconductive coils. A direct current

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†This work has been partially supported by the NBS Office of Standard Reference Data under Contract 3-35717.

*This data set has also been published in a Soviet book "New Materials and Methods of Investigating Metals and Alloys," edited by Professor I.I. Kornilov of the Baikov Institute of Metallurgy, 1966, Moscow, pp. 1-98.

**Hybrid magnets composed of superconductive coils with regular magnetic material cores are planned for 25 Tesla fields.

transformer has been produced utilizing a special arrangement of superconductive thin films for tunneling. A dc superconductive motor of 3250 hp has been operated successfully for water pumping and a 150 hp superconductive generator constructed.

A 5 MW ac electrical generator with the cooled superconductive elements on the rotor has been constructed.

In the area of propulsion application the detailed design of a 3000 hp dc motor and generator is under way with an eye in the future on a 40,000 hp motor and related 20,000 hp generator.

Recent significant technical achievements utilizing superconductivity have included a prototype simulated rail car made in Japan weighing over 2000 kg levitated to a height of 10 cm by superconductive magnets reacting against conducting coils. The car has been accelerated to a velocity of 50 km/hr. It now appears that the use of superconductive coils to produce the strong magnetic fields required for levitation is feasible and that the major technical problem will be in the development of methods for positional control of the train cars at high speeds.

The Josephson quantum effects are being exploited in various high precision voltage-current devices and in the definition of the standard volt.

Superconductive magnet systems have become common items in laboratories and advance technology centers throughout the world.

The influx of new literature covering new superconductive materials continues unabated. The recent 13th International Conference on Low Temperature Physics at Boulder, Colorado included about 170 papers on the science of superconductive phenomena and materials and the prior conference in Japan presented a like number. Also, additional large technical meetings focusing on applications, such as the applied superconductivity conference* recently held at Annapolis, are regularly scheduled.

GENERAL PROPERTIES OF SUPERCONDUCTORS**

The historically first observed and most distinctive property of a superconductive body is the near total loss of resistance at a critical temperature T_c characteristic of each material. Figure 1(a) illustrates schematically two types of possible transitions. The sharp vertical discontinuity is indicative of that found for a single crystal of a very pure element or one of a few well annealed alloy compositions. The broad transition, illustrated by broken lines, suggests the transition shape seen for materials that are inhomogeneous and contain unusual strain distributions. Careful testing of the resistivity limits for superconductors shows that it is less than 4×10^{-25} ohm-m, while the lowest resistivity observed in metals is of the order of 10^{-15} ohm-m. If one compares the resistivity of a superconductive body to that of copper at room temperature, the superconductive body is at least 10^{17} times less resistive.

The temperature interval, T_c, over which the transition between the normal and superconductive states take place, may be of the order of as little as 2×10^{-5} K or several K in width, depending upon the material state. The narrow transition width was observed in 99.9999 purity gallium single crystals.

A Type I superconductive body below T_c, as exemplified by a pure metal, exhibits perfect diamagnetism and excludes a magnetic field up to some critical field H_c, whereupon it reverts to the normal state as shown in the H-T diagram of Figure 1(b).

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* Proceedings of the 1972 Applied Superconductivity Conference (May 1-3, 1972, Annapolis, Md.) (IEEE, Order Dept., 345 East 47 Street, N.Y., N.Y. 10017).

** The NBS Office of Standard Reference Data, as administrator of the National Standard Reference Data System, has officially adopted the use of SI units for all NSRDS publications, in accordance with NBS practice. This publication does not use SI units uniformly because contractual commitments with the author predate establishment of a firm policy on their use by NBS. Other appropriate conversion factors will be found in Tables 1 and 2. We urge that specialists and other users of data in this field accustom themselves to SI units as rapidly as possible.

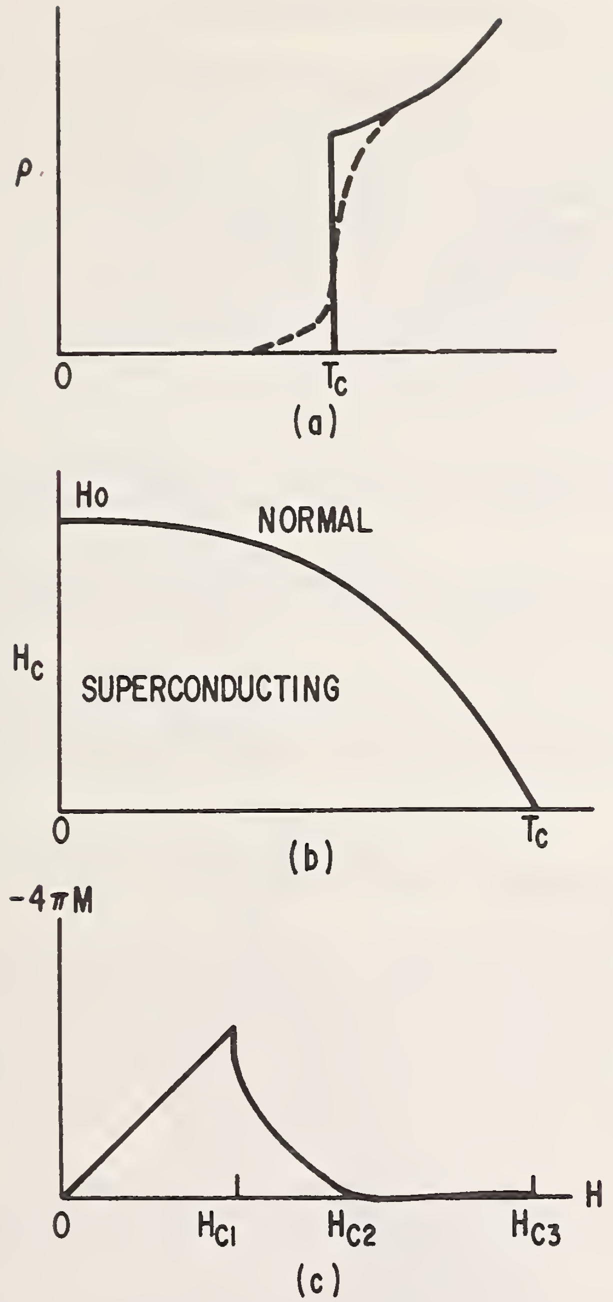

Figure 1. Physical properties of superconductors. (a) Resistivity versus temperature for a pure and perfect lattice (solid line). Impure and/or imperfect lattice (dashed line). (b) Magnetic field-temperature dependence for Type I or "soft" superconductors. (c) Schematic magnetization curve for "hard" or Type II superconductors.

HIGH FIELD SUPERCONDUCTIVITY

The discovery of the large current-carrying capability of Nb_3Sn and other similar alloys has led to an extensive study of the physical properties of these alloys. In brief, a high field superconductor, or Type II superconductor, passes from the perfect diamagnetic state at low magnetic fields to a mixed state and finally to a sheathed state before attaining the normal resistive state of the metal. The magnetization of a typical high field superconductor is shown in Figure 1(c). The magnetic field values separating the four stages are given as H_{c1}, H_{c2}, and H_{c3}. The superconductive state below H_{c1} is perfectly diamagnetic and identical to the state of most pure metals of the "soft" or Type I type. Between H_{c1} and H_{c2} a "mixed state" is found in which quantized flux lines or vortices create lines of normal conductor in a superconductive matrix. The volume of the normal state is proportional to $-4\pi M$ in the "mixed state" region. Thus at H_{c2} the fluxon density has become so great as to drive the interior volume of the superconductive body completely normal. Between H_{c2} and H_{c3} the superconductor has a sheath of current-carrying superconductive material at the body surface, and above H_{c3} the normal state exists. With several types of careful measurement, it is possible to determine H_{c1}, H_{c2}, and H_{c3}. Table IV contains some of the available data on high field superconductive materials.

A more complete representation of the states present in a high field superconductor is given in Fig. 2 with the additional phenomenon called fluctuation superconductivity. The latter phenomenon is evidenced in several physical properties above the appropriate critical fields and temperatures.

High field superconductive phenomena are also related to specimen dimension and configuration. For instance, the Type I superconductor, Hg, has entirely different magnetization behavior in high magnetic fields when contained in the very fine set of filamentary tunnels in an unprocessed Vycor glass. The great majority of superconductive materials are Type II. The elements in very pure form with the possible exceptions of vanadium and niobium are Type I.

A further complication in describing a high field superconductor has been found in a few examples wherein a specific alloy may exhibit Type II behavior up to a temperature intermediate between T_c and absolute zero and then is a Type I superconductor from the intermediate temperature to T_c.

NEW DEVELOPMENTS IN SUPERCONDUCTIVE MATERIALS

Among superconductive material highlights for 1971-1973 must be included the definitive jump in the highest available critical temperature of known superconductors. John R. Gavaler has reported (Appl. Phys. Letters, Oct. 15, 1973)* that he has prepared, by sputtering techniques, thin films (microns) of Nb-Ge alloy near the composition Nb_3Ge with an onset critical temperature of 22.3°K. The films are deposited on hot substrates at 700-900°C. This is the first superconductive material with a critical temperature substantially above the boiling point of liquid hydrogen and consequently has already engendered considerable technological interest. Gavaler attributes the high critical temperatures of the films "to the formation of a more nearly perfect stoichiometric Nb_3Ge compound than was previously obtainable."

Shortly later, L. R. Testardi reported (Symposium on Superconductivity and Lattice Instabilities, Gatlinburg, Sept. 1973, Unpublished) that he had attained an onset critical temperature of 23.2°K, by following a somewhat different path of sputtering onto a very hot substrate. This critical temperature is just over 10% higher than those of the Nb_3(Al, Ge) alloys which had held the highest temperature position.

An intense peak of interest has centered on tiny organic crystals of TTF/TCNQ (tetrathiofulvalene/tetracyano-p-quinodimethane) which has the largest maximum electrical conductivity of any known organic compound ($\sigma_{max} = 1.47 \times 10^4$ ohm^{-1} cm^{-1} at 66°K). (See Ferraris et al., J. Amer. Chem. Soc. 95, 948 (1973).) L. B. Coleman, et al. (Solid State Commun. 12, 1125 (1973)) has reported extraordinary conductivity maxima in TTF/TCNQ single crystals near approximately 60°K which at first sight suggested the onset of superconductive fluctuations just above a Peierls instability. The latter report continues to be investigated because of difficulty in reproducing the experimental results routinely and interpretation of the mechanisms producing the maxima. (For recent discussion, see W. D. Metz, Science 180, 1041 (1973) and G. B. Lubkin, Physics Today 26, 17 (1973).

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*Appl. Phys. Letters 23, 480 (1973).

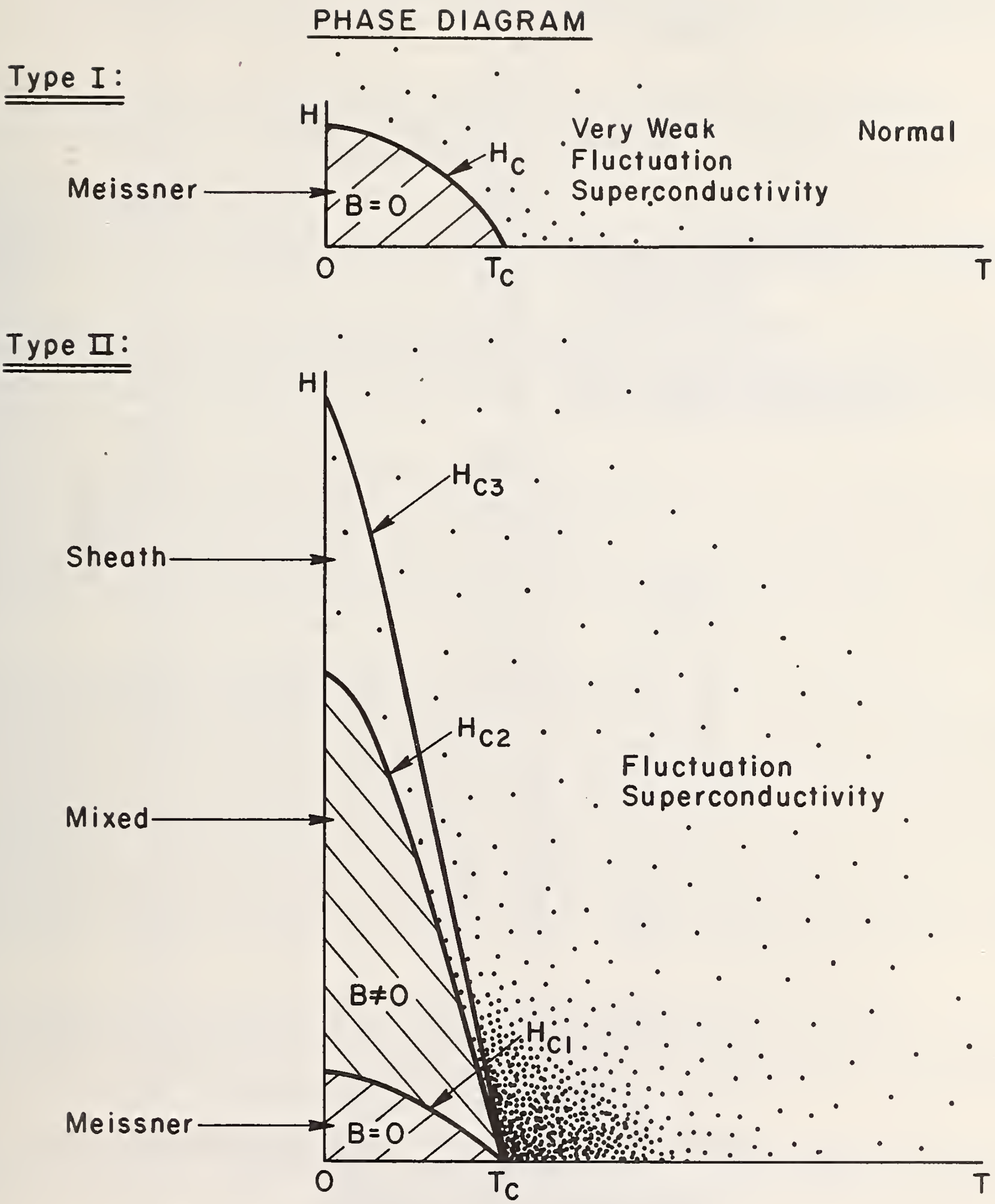

Figure 2. H-T phase diagram representation of Type I and Type II superconductors with locations for fluctuation superconductivity indicated. (R. R. Hake, personal communication and J. Applied Phys 40, 5148 (1969). "The Thermodynamics of Type I and Type II Superconductors.")

An interesting development with an A15 crystal type cubic structure alloy found to be superconductive many years ago in the 12.5 - 14.5K range is Nb_3Ga. Careful metallurgical preparation and annealing sequences recently discovered (G.W. Webb, et al., Solid State Commun. 9, 1769 (1971)) have raised the onset critical temperature to 20.3K. It is of interest to note the location of this new value for Nb_3Ga and the Nb_3Ge thin film critical temperatures on the electron/atom ratio plot as shown in Fig. 3. Will a 25°K critical temperature be attained at the 4.7 electron/atom peak position?

The first high critical temperature superconductive oxide has been reported (D.C. Johnston, et al., Mat. Res. Bull. 8, 777 (1973)) with a critical temperature as high as 13.7°K (onset). The composition is $Li_{1-x}Ti_{2-x}O_4$ and is one of approximately 200 known spinel ($H1_1$) compounds of which only three other examples have been found superconductive with critical temperatures below 4.8°K.

An interesting observation of the superconductive state in Pd-Ag alloys charged with D or H by ion implantation has been reported by Buckel and Stritzker (Phys. Letters 43A, 403 (1973)). The gas constituents are introduced at 4.2°K and are localized in a very thin surface layer. Critical temperatures as high as 16°K have been found for about 20 atom percent Ag in Pd with the D implanted surface layer.

The element lutetium was discovered to be superconductive at ~0.5K at a pressure of 125-150 kbar (J. Wittig, et al., to be published in Proceedings, LT13) and in Hafnium at ~0.22K at 150 kbar (C. Probst and J. Wittig, to be published in Proceedings, LT13). These demonstrations of the presence of the superconductive state are important in outlining the theoretical chemistry and solid state properties of the early transition elements including lanthanum.

Among new moderately high critical temperature superconductors reported recently have been $Mo_{5.1}Pb_{0.9}S_6$ at 13.2 - 12.5K and $Li_{0.1-0.3}Ti_{1.1}S_2$ at over 13K with "onset" temperatures as high as 15K. Both compound families are outside the cubic structure system. The former is rhombohedral (B.T. Matthias, et al., Science 175, 1465 (1972)) and the latter hexagonal (H.E. Barz, et al., Science 175, 884 (1972)). Both systems are ternary and contain elements not found to be superconductive in elemental form and both systems are three-dimensional crystalline materials and show no strong evidence of layering tendencies. It is interesting to note that the $(Y, Th)_2C_3$ system (see TN 724), which gives maximum T_c of 17K, is a ternary with a novel structure, although of the cubic system.

An important new effort towards calibration and the standardization of techniques and temperatures for the measurement of superconductive critical temperatures is the work at the National Bureau of Standards by R.J. Soulen, Jr. and J.H. Colwell (J. Low Temp. Phys. 5, 325 (1971)) and J.F. Schooley and R.J. Soulen, Jr. (Proc. 12th Intern. Conf. on Low Temp. Phys. [Academic Press of Japan, Tokyo, 1971] and the XIII Inter. Congress of Refrigeration, pp. 192-198). They have carefully measured, compared and tested the reproducibility and width of the critical temperature of Pb, In, Al, Zn and Cd for thermometric fixed points as well as having looked very carefully at the equivalence of the transition temperature when measured by the three techniques: (1) Electrical resistance, (2) magnetic susceptibility and (3) heat-capacity measurements. In the case of well-annealed polycrystalline and pure (99.999%) indium they find that the midpoints of each type transition are identical to within 0.1 mK. Arrangements have been made to provide cryogenic experimenters with samples and devices through the NBS Office of Standard Reference Materials. (Ask* for NBS Special Publication 260-44, "Preparation and Use of Superconductive Fixed Point Devices SRM 767.")

A central topic in the search for the criteria of high critical temperature superconductive materials has been the association of "instabilities" with most above average critical temperature superconductors. The instabilities may be characterized as incipient phase changes above or near the critical temperatures. (See AIP Conf. Proc. No. 4, "Superconductivity in d- and f- Band Metals," New York, 1972, B.T. Matthias, p. 367 and J.C. Phillips, Phys. Rev. Letters, 26, 543 (1971).)

The general relevance and widespread evidence for lattice instabilities became evident at the Symposium on Superconductivity and Lattice Instabilities in Gatlinburg (Sept. 1973) which drew over 190 participants from 80 U.S. institutions and seven additional countries.

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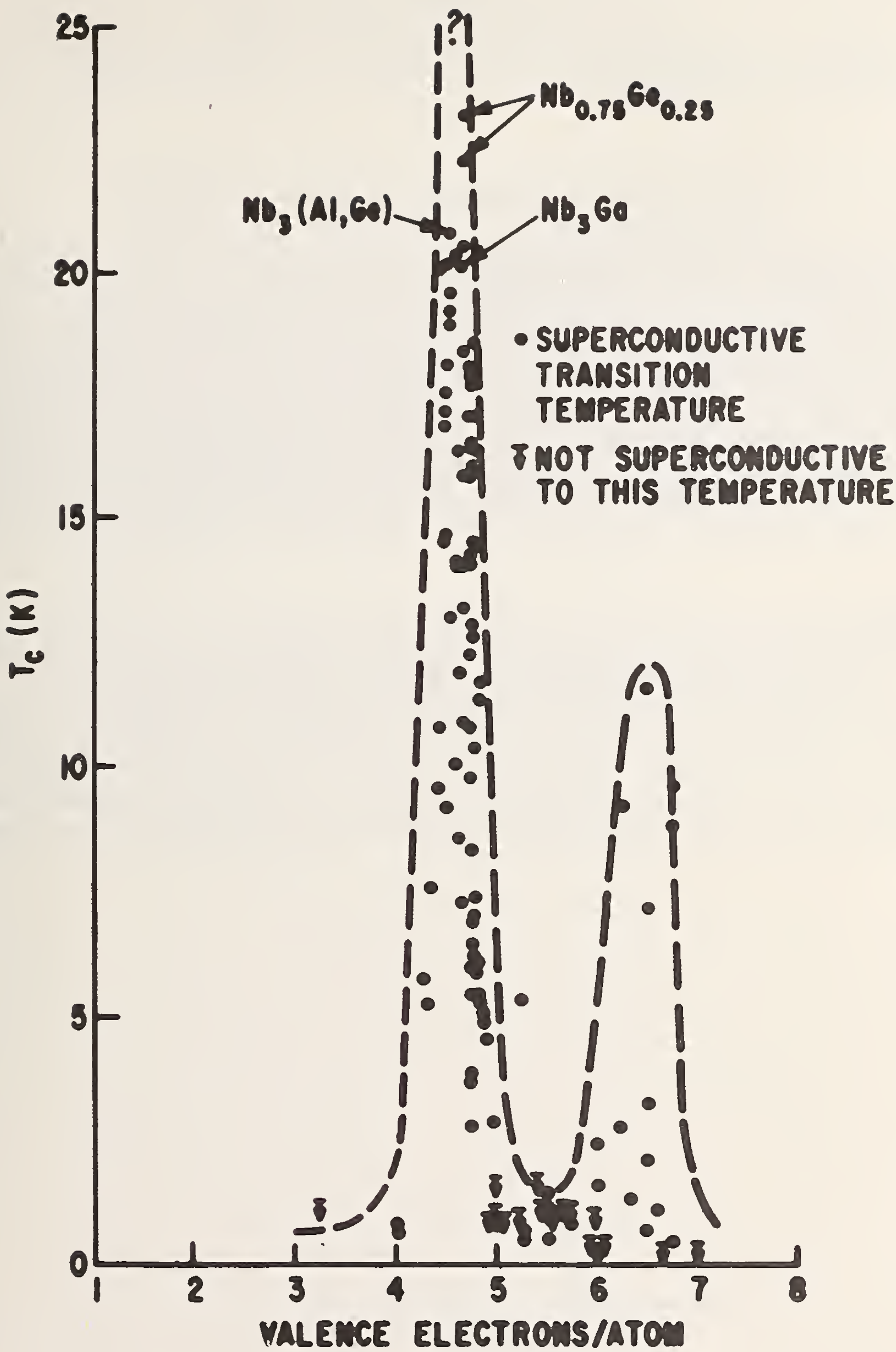

Figure 3. Superconductive critical temperature versus valence electron/atom ration for A15 or "B-W" type compounds. The uppermost points for $Nb_{0.75}Ge_{0.25}$ sputtered films are onset critical temperatures.

The past two years has included not only the above briefly mentioned but substantial advances in superconductive materials, but also the naming of the Nobel Prize winners for the development of the BCS. theory. The winners' Nobel lectures are now published: Prof. J. Bardeen, in Physics Today 26, 41 (1973); Prof. L.N. Cooper, Physics Today 26, 31 (1973) and Prof. J.R. Schrieffer, Physics Today 26, 23 (1973). The 1973 Nobel prizes for physics have recently been awarded to Drs. Ivar Giaever and B.D. Josephson for their work on superconductive tunneling.

METALLURGICAL ASPECTS OF SAMPLE PREPARATION

The sensitivity of superconductive properties to the material state is most pronounced and has been used on occasion in a reverse sense to study and specify the detailed state of alloys. the mechanical state, the homogeneity, and the presence of impurity atoms and other electron scattering centers are all capable of controlling the critical temperature and the current-carrying capabilities in high magnetic fields. Well annealed specimens usually show sharper transitions than those that are strained or inhomogeneous. This sensitivity to mechanical state underlines a general problem in the tabulation of properties of superconductive materials. The occasional divergent values of the critical temperature and of the critical fields quoted for a Type II superconductor may lie in the variation in sample preparation. Critical temperatures of materials studied early in the history of superconductivity must be evaluated in light of the probable metallurgical state of the material as well as the availability of less pure starting elements. It has been noted that recent work has given extended consideration to the metallurgical aspects of sample preparation.

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We acknowledge the helpful suggestions, corrections and submission of reprints and data from the following: M.B. Robin, J.E. Cox, Robert Reich, E. Bucher, J. Wittig, R.E. Emstrom, F.E. Wang, W.O. Gentry, E.E. Havinga, K. Gschneidner, Jr., M.S. Lubell, B.T. Matthias, S. Foner, J.R. Gavaler, S. Methfessel, B. Stritzker, E.M. Savitskii, A. Junod, L.R. Testardi, A.G. Shepelev, D. Schneider, C. Rizzuto, J.F. Schooley, R.H. Hammond, and C.J. Raub and others inadvertently omitted.

Continued excellent assistance by Miss Vera Chase of our library staff is acknowledged and the help and patience of Mrs. Joan Wolfe and Miss Helen Wilford in report preparation is much appreciated.

NOTES CONCERNING THE DATA TABLES

Table 1 lists the elements and some of their superconductive properties. The data have been selected generally from recent studies in which sample purity and perfection appear to have been seriously considered.

Table 2 contains superconductive materials reported during the period plus all materials that have been reported to be tested specifically for a superconducting transition down to some temperature T_n without discovery of a transition. All compositions are denoted on an atomic basis, i.e., AB, AB_2 or AB_3 for compositions, unless noted. Solid solutions or odd compositions may be denoted as A_zB_{1-z}, or A_zB. A series of three or more alloys is indicated as A_xB_y or by actual indication of the atomic fraction range such as $A_{0-0.6}B_{1-0.4}$. The critical temperature of such a series of alloys is denoted by a range of values or possibly the maximum value. In many cases several references will be found for the same alloy. This usually denotes a separate measurement by each source, and in a few cases may even indicate a disagreement over the superconductive properties. In view of the previous discussions concerning the variability of the superconductive properties as a function of purity and other metallurgical aspects, it is recommended that the appropriate literature be checked to determine the most probable critical temperature or critical field of a given alloy. Another point of difficulty lies in the selection of the critical temperature from a transition observed in the effective permeability or the change in resistance, or possibly the incremental changes observed in frequency observed by certain techniques. Most authors choose the mid-point of such curves as the probable critical temperature of the idealized material, and others will choose the highest temperature at which a deviation from the normal state property is observed. Often the choice is not specified.

Table 3 is indicative of a new facet in superconductive materials; the metallic or inorganic superconductor combined most often with an intercalated or layered organic substance. These special materials exhibit three-dimensional superconductivity and high anisotropic high magnetic field properties.

Table 4 lists high magnetic field superconductors.

A bibliography of review articles concerned primarily with the experimental and material aspects of superconductivity is appended.

Table 1. Properties of the Superconductive Elements (New Data on the Elements are Referenced in Table 2 Along with Crystal Structure Data and Parameters for Non-superconductive Elements)

Element	T_c(K)	H_o(oersteds)[1]	θ_D(K)	γ(mJmole^{-1} deg.K^2)
Al	1.175	104.93	420	1.35
Be	0.026			0.21
Cd	0.518,0.52	29.6	209	0.688
Ga	1.0833	59.3	325	0.60
Ga (β)	5.90, 6.2	560		
Ga (γ)	7.62	950, HF*		
Ga (δ)	7.85	815		
Hg (α)	4.154	411	87,71.9	1.81
Hg (β)	3.949	339	93	1.37
In	3.405	281.53	109	1.672
Ir	0.14, 0.11	19	425	3.27
La (α)	4.88	808, 798	142	10.0, 11.3
La (β)	6.00	1,096	139	11.3
Mo	0.916	90, 98	460	1.83
Nb	9.25	1970, HF	277, 238	7.80
Os	0.655	65	500	2.35
Pa	1.4			
Pb	7.23	803	96.3	3.0
Re	1.697	188, 211	415	2.35
Ru	0.493	66	580	3.0
Sb	2.6-2.7**	HF		
Sn	3.721	305	195	1.78
Ta	4.47	831	258	6.15
Tc	7.73, 7.78	1410, HF	411	4.84, 6.28
Th	1.39	159.1	165	4.31
Ti	0.39	56, 100	429, 412	3.32
Tl	2.332, 2.39	181	78.5	1.47

Note: Symbols explained on pages 13 and 14.

(Table 1 cont'd)

Element	T_c(K)	H_o(oersteds)[1]	θ_D(K)†	γ(mJmole^{-1} deg.K^2)
V	5.43, 5.31	1100,1400,HF	382	9.82
W	0.0154	1.15	550	0.90
Zn	0.875	55	319.7	0.633
Zr	0.53	47	290	2.78
Zr (ω)	0.65			
Thin Films Condensed at Various Temperatures				
Al	1.18-~5.7	HF		
Be	~03, -9.6	HF		
with KCl	6.5-10.6	HF		
with Zn etio-porphyrin	10.2			
Bi	~2-~5, 6.11, 6.154, 6.173			
Cd	0.53-0.91			
Ga	6.4-6.8, 7.4-8.4, 8.56			
In	3.43-4.5			
in glass pores	3.68-4.17	HF		
La	5.0-6.74			
Mo	3.3-3.8, 4-6.7			
Nb	6.2-10.1	HF		
Pb	~2 - 7.7			
Re	~7			
Sn	3.6, 3.84-6.0			
Ta	<1.7-4.25,3.16-4.8	HF		
Ti	1.3			
Tl	2.64			
V	5.14-6.02			
W	<1.0-4.1			
Zn	0.77-1.48			

DATA FOR ELEMENTS STUDIED UNDER PRESSURE (Table 1 Cont'd)

Element	T_c (K)	Pressure[2]
As	0.31-0.5	220-140 kbar
	0.2-0.25	~140-100 kbar
Ba II	~1.3	55 kbar
III	3.05	85-88 kbar
III	~5.2	> 140 kbar
Bi II	3.916, 3.90, 3.86	25, 25.2, 26.8 katm
III	6.55, 7.25	~37 kbar, 27-28.4 katm
IV	7.0	43, 43-62 kbar
V	8.3, 8.55	81 kbar
VI	8.55	90, 92-101 kbar
Ce	1.7	50 kbar
Cs	~1.5	> ~125 kbar
Ga II	6.24, 6.38	≥35 katm
II'	7.5	≥ 35 katm Then P→0
Ge	4.85 - 5.4; 5.35	~120 kbar; 115 kbar
La	~5.5-11.93	0 to ~140 kbar
P	4.7	>100 kbar
	5.8	170 kbar
Pb II	3.55, 3.6	160 kbar
Sb	3.55	85 kbar
	3.52	93 kbar
	3.53	100 kbar
	3.40	~150 kbar
Se II	6.75, 6.95	~130 kbar
Si	6.7; 7.1	120 kbar
Sn II	5.2	125 kbar
	4.85	160 kbar
III	5.30	113 kbar

(Table 1 Cont'd.)

Element	T_c (K)	Pressure[2]
Te II	2.05	43 kbar
	3.4	50 kbar
III	4.28	70 kbar
IV	4.25	84 kbar
Tl (CUB)	1.45	35 kbar
(HEX)	1.95	35 kbar
U	2.3	10 kbar
Y	~1.2,~2.7	120-170 kbar

† For another data set see Mendelssohn, K., Cryophysics, p. 178 (Interscience, New York, 1960) and Gschneidner, K. A., Jr. in Solid State Physics 16, 275-426 (1964).

‡ Parkinson, D. H., Rep. progr. Phys. 21, 226 (1958). Also see Reference 572 and Gschneidner, K. A., Jr. in Solid State Physics 16, 275-426 (1964).

HF* See Table 4 for additional data on H_{c1}, H_{c2} and H_{c3}.

[1]To convert "oersteds" to ampere/meters, multiply by 79.57.

[2]To convert "katm" to "newton/meter^2", multiply by 1.013 x 10^8.
To convert "kbar" to "newton/meter^2", multiply by 1 x 10^8.

Table 2. TABULATION OF SUPERCONDUCTIVE MATERIALS

Table 2. Tabulation of Superconductive Materials (including Proven Non-superconductors) with Critical Temperatures and Fields, Crystal Structure Data where determined, and Source References.

Symbols used:

T_n	The lowest temperature at which a material has been checked for a superconductive transition.
HF	In H_o column, indicates that some information is available in Table 4 on high field magnetic properties.
▽	On material or reference indicates a thin film study.
T'_c(----)	Denotes incremental changes in T_c from T_c of pure metal. For example, T'_c (+0.05) denotes that two or more measurements have been made by adding a small amount of alloying element to a metal to form a dilute alloy (or mixture) and in so doing the T_c has been raised by 0.05K. The entry T'_c (-0.3 K/a%) would indicate two or more measurements in which the critical temperature decreased 0.3K per atomic percent of alloying element added.
n	Number of carriers in superconductive semiconductive materials
#	Electronic specific heat (γ) and/or Debye θ data given.

KEY TO CRYSTAL STRUCTURE TYPES FOUND IN TABLE 2

"Struckturbericht" Type*	Example	Class
A1	Cu	Cubic, f.c.
A2	W	Cubic, b.c.
A3	Mg	Hexagonal, close packed
A4	Diamond	Cubic, f.c.
A5	White Sn	Tetragonal, b.c.
A6	In	Tetragonal, b.c. (f.c. cell usually used)
A7	As	Rhombohedral
A8	Se	Trigonal
A10	Hg	Rhombohedral
A12	α-Mn	Cubic, b.c.
A13	β-Mn	Cubic
A15	β-W	Cubic
B1	NaCl	Cubic, f.c.
B2	CsCl	Cubic
B3	ZnS	Cubic
B4	ZnS	Hexagonal
$B8_1$	NiAs	Hexagonal
$B8_2$	Ni_2In	Hexagonal
B10	PbO	Tetragonal
B11	γ-CuTi	Tetragonal
B17	PtS	Tetragonal
B18	CuS	Hexagonal
B20	FeSi	Cubic
B27	FeB	Ortho-rhombic

*See W. B. Pearson, Handbook of Lattice Spacing and Structures of Metals (Pergamon, New York, 1958), p. 79, also Vol. II (Pergamon, New York, 1967), p. 3.

KEY TO CRYSTAL STRUCTURE TYPES FOUND IN TABLE 2

"Struckturbericht" Type *	Example	Class
B31	MnP	Ortho-rhombic
B32	NaTl	Cubic, f.c.
B34	PdS	Tetragonal
B_f	δ-CrB	Ortho-rhombic
B_g	MoB	Tetragonal, b.c.
B_h	WC	Hexagonal
B_i	γ′-MoC	Hexagonal
C1	CaF_2	Cubic, f.c.
$C1_b$	MgAgAs	Cubic, f.c.
C2	FeS_2	Cubic
C6	CdI_2	Trigonal
C11b	$MoSi_2$	Tetragonal, b.c.
C12	$CaSi_2$	Rhombohedral
C14	$MgZn_2$	Hexagonal
C15	Cu_2Mg	Cubic, f.c.
$C15_b$	$AuBe_5$	Cubic
C16	$CuAl_2$	Tetragonal, b.c.
C18	FeS_2	Ortho-rhombic
C22	Fe_2P	Trigonal
C23	$PbCl_2$	Ortho-rhombic
C32	AlB_2	Hexagonal
C36	$MgNi_2$	Hexagonal
C37	Co_2Si	Ortho-rhombic
C49	$ZrSi_2$	Ortho-rhombic

KEY TO CRYSTAL STRUCTURE TYPES FOUND IN TABLE 2

"Struckturbericht" Type*	Example	Class
C54	$TiSi_2$	Ortho-rhombic
C_c	Si_2Th	Tetragonal, b.c.
DO_3	BiF_3	Cubic, f.c.
DO_{11}	Fe_3C	Ortho-rhombic
DO_{18}	Na_3As	Hexagonal
DO_{19}	Ni_3Sn	Hexagonal
DO_{20}	$NiAl_3$	Ortho-rhombic
DO_{22}	$TiAl_3$	Tetragonal
DO_e	Ni_3P	Tetragonal, b.c.
$D1_3$	Al_4Ba	Tetragonal, b.c.
$D1_c$	$PtSn_4$	Ortho-rhombic
$D2_1$	CaB_6	Cubic
$D2_c$	MnU_6	Tetragonal, b.c.
$D2_d$	$CaZn_5$	Hexagonal
$D5_2$	La_2O_3	Trigonal
$D5_8$	Sb_2S_3	Ortho-rhombic
$D5_c$	Pu_2C_3	Cubic
$D7_3$	Th_3P_4	Cubic, b.c.
$D7_b$	Ta_3B_4	Ortho-rhombic
$D8_1$	Fe_3Zn_{10}	Cubic, b.c.
$D8_2$	Cu_5Zn_8	Cubic, b.c.
$D8_3$	Cu_9Al_4	Cubic
$D8_8$	Mn_5Si_3	Hexagonal
$D8_b$	CrFe	Tetragonal

KEY TO CRYSTAL STRUCTURE TYPES FOUND IN TABLE 2

"Struckturbericht" Type*	Example	Class
$D8_i$	Mo_2B_5	Rhombohedral
$D10_2$	Fe_3Th_7	Hexagonal
$E2_1$	$CaTiO_3$	Cubic
$E9_3$	Fe_3W_3C	Cubic, f.c.
$H1_1$	Al_2MgO_4	Cubic, f.c.
$L1_0$	CuAu	Tetragonal
$L1_2$	Cu_3Au	Cubic
L'_{2b}	ThH_2	Tetragonal, b.c.
L'_3	Fe_2N	Hexagonal

TABLE 2. TABULATION OF SUPERCONDUCTIVE MATERIALS (INCLUDING PROVEN NON-SUPERCONDUCTORS) WITH CRITICAL TEMPERATURES AND FIELDS, CRYSTAL STRUCTURE DATA WHERE DETERMINED, AND REFERENCES. (SEE IV-1 FOR SYMBOLS)

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref.
Ag Al_x					1235▽
$Ag_{1-0}Al_{0-1}Th_2$	2.2-0.1		C16		1377
$Ag_{0.01}Be_{0.99}$				0.45	1057
$Ag_{0.05}Be_{0.95}$				0.45	1057
$Ag_7F_2H\ O_8$	1.0-1.5				1146
$Ag_7F_{0.25}N_{0.75}O_{10.25}$	1.04				1146
$Ag_{0.45}Ge_{0.55}$(Deposited ~4K)	1.2				1179▽
Ag Ge (200-600A)	1.2				1082▽
Ag In_2	2.11		C16		1377
$Ag_xMn_ySn_{0.97-x-y}Te$	1.85-1.3, (n = 3.5 x 10^{21}) 1.8-1.1, (n = 2.8 x 10^{21}) 1.7-0.5 (n = 2.2 x 10^{21}) <0.044 (y = >1000 ppm)		B1		1246
$Ag_{0.10}Mn_ySn_{0.97-y}Te$	2.0-1.3		B1		1246
Ag Mo_4S_5	8.3				1193#
$Ag_{1.2}Mo_{4.8}S_6$	8.9-8.4		Rhomb		1163
Ag_2Pd_3S	1.13 ± 0.02K		A13		1221
$Ag_{1-0}Pd_{0-1}Th_2$	2.1-2.3-1.1-1.3-0.7		C16		1377
$Ag_{.05}Rh_{.04}Ti_{.91}$	1.95				1060
$Ag_xSn_{0.97-x}Te$ (n = 10^{21}) 0.12-1.1°K(sintered) 8 x 10^{21}) 0.2-2°K (as cast)			B1		1246
Ag Th_2	2.19		C16		1377
Al (See Table 3)					
Al (2000-35A)	1.18-2.16				1194▽
Al (~500A)	2.6-2.7				1134
$Al_{99.999}$	1.16				1061#
Al (<100A; Deposited 105K)	2.45				1062▽
Al (15 - 85A)	3-4.6-3.7				1259▽
Al					1267
Al (<40-1000A)	3.74-<1.26	HF			1294▽
Al (2000-40A)	1.25-2.16°K				1302▽
Al	1.180				1357
$Al_{0.95}B_{0.05}Nb_3$	19.1		A15		1360
$Al_{1-y}B_yNb_3$	18-19.1-18.5 (aged) 16.3-17-11 (as cast)		A15		1360

[1] See comment bottom page 2.

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref.
$Al_{1-y}Be_yNb_3$	17.3-19.6-13 (aged) 16.5-18-13 (as cast)		A15		1360
$Al_{0.95}Be_{0.05}Nb_3$	19.6		A15		1360
$Al_{1-x}Cr_x$	T_c'(-0.115)				1357
$Al_{2.06}Cu$	0.65		C16		1377
Al Cu (750A, alternate layers)	2.6-3.45				1134▽
$Al_{1-x}Fe_x$	T_c'(-0.055)				1357
$Al_{0.5}Ga_{0.5}Nb_3$	19.0	HF			1339
$Al_{1-0}Ga_{0-1}V_3$	11.5-9-12.0		A15, A2		1369
$Al_{1-x}Ga_xNb_3$(Annealed)	18.3-18.7-16.1		A15		1072
$Al_{0.1}Ga_{0.9}V_3$	13.9,14.9		A15		1073
$Al_{0.3}Ga_{0.7}V_3$	13.9		A15		1073
$Al_{0.5}Ga_{0.5}V_3$	12.9		A15		1073
Al $Gd_{0-0.009}La_{3-x}$	5.97-<1	HF			1364
$Al_2Gd_{0-0.004}La_{1-0.996}$	3.20-1.52	HF			1262
Al $Gd_{0-0.009}La_{3-2.991}$	6.0-<1.0				1170
$Al_2Gd_xLa_{1-x}$	3.24-0.5		C15		1111
Al Ge (Evaporated, 77K)	5.5				1120▽
$Al_{0.65}Ge_{0.35}Hf_{3-0}Nb_{0-3}$	~3-6-4-20				1173
Al Ge Nb_3	10-17.5				1276▽
$Al_{0.16}Ge_{0.05}Nb_{0.79}$	20.7	HF			1339
$Al_{1-y}Ge_yNb_{1-x}Ta_x$	18.5-11		A15		1360
$Al_{0.75}Ge_{0.25}Nb_3$	18.3-14.0, 13.3-11.7				1164
$Al_{0.8}Ge_{0.2}Nb_3$	16.0	HF			1174▽
$Al_{1-x}Ge_xNb_3$					1079
$Al_{1-x}Ge_xNb_3$(Annealed x=0-0.62)	18.4-19.9-13.7		A15		1072
$Al_{0.85}Ge_{0.15}Nb_{2.85}Ta_{0.15}$	20.5		A15		1360
$Al_{1-0.6}Ge_{0-0.4}Nb_{2.85}Ta_{0.15}$	19.5-20.5-18.5 (aged)		A15		1360
$Al_{1-x}Ge_xTh_2$	0.2-<0.1		C16		1377
$Al_{0.65}Ge_{0.35}Nb_{0-3}Ti_{3-0}$	<3-6-4-20				1173
$Al_{0.65}Ge_{0.35}Nb_{0-3}Zr_{3-0}$	<1.5-10-5-20 (annealed) <1.5-6-5-18.7 (as cast)				1173
$Al_{1-0}Ge_{0-1}V_3$	~12-12.5-6		A15, A2		1369

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref.
$Al_{0.7}Ge_{0.3}V_3$			A15	2.0	1073
$Al_{1-x}In_xNb_3$ (x=0-0.33)	18.4-16.0		A15		1072
$Al_{0.046}In_{0.151}Sn_{.803}$	4.38(Unannealed) 3.652 (Annealed)				1201
Al_2La	3.26				1314
$Al_{0.11}Mg_{0.89}$				0.013	1340
$Al_{1-x}Mn_x$	T_c'(-0.11)				1357
Al N	Data given				1195▽
Al N O(24-117A)	Data given				1195
Al Nb_3	18.8				1215#
Al Nb_3	9.3-16.6				1276▽
Al Nb_3	18.6	HF			1339
Al Nb_3	18.3 (Annealed) 17.4 (As cast)		A15		1176#
Al Nb_3	17.7-15.5, 13.6-11.8				1164
Al Nb_3	18.22 (Max.)				1066
Al Nb_3					1079
Al Nb_3	17.4, 17.6				1101
$Al_{.25}Nb_{.75}$	18.3				1064
Al Nb_3	18.1	HF			1075
$Al_{0.5}Nb\ Sn_{0.5}$	≈ 15.3				1236
$Al_{1-0}Nb_3Sn_{0-1}$	17.2-15.3-18.2		A15		1236
$Al_{0-0.1}Nb_3Sn_{1-0.9}$	17.9-18.58-18.1		A15		1115
Al Nb Sn	17.45		A15		1115
$Al_{1-x}Nb_3Sn_x$	18.4-15.7-18 (Annealed)		A15		1072
Al $Nb_{2.1}V_{0.9}$	12.5 (13.4 Annealed)		A15		1073
Al $Nb_{2.7}V_{0.3}$	15.4 (16.7 Annealed)		A15		1073
Al O(15 - 190A)	1.81-2.188				1224▽
Al Sb (~125 kbar)	2.8				1104
$Al_{1-0}Si_{0-1}V_3$	~10-16.5		A15, A2		1369
$Al_{0.1}Si_{0.9}V_3$	15.1 (16.1 Annealed)		A15		1073
$Al_{0.2}Si_{0.8}V_3$	13.6 (15.7 Annealed)		A15		1073
$Al_{.152}Sn_{.848}$	3.675 (Unannealed) 3.690 (Annealed)				1201
Al Sn (1100A Alternate layers)	4.6-5.6				1134▽

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref.
$Al_{1-0}Sn_{0-1}V_3$	~5.5-6-4		A15, A2		1369
Al_3Th	0.2		D019		1373
Al Th_2	0.09		C16		1377
$Al_3Th_{1-0.8}Y_{0-0.2}$			D019	0.05	1373
$Al_{1-x}Ti_x$	T_c'(-0.04)				1357
$Al_{1-x}V_x$	T_c'(-0.08)				1357
Al V_3(Deposited ~400°C)	9.6		A15		1363▽
Al V_3			A2	3.0	1369
Al_2Yb			C15	0.06	1372
Al Zn_2Zr			$L1_2$	0.08	1372
$As_{0.25}Se_{0.75}Y$	0.72-0.78		B1		1219
$Au_{0.03}Be_{0.97}$	1.80		Hex		1057
$Au_{0.06}Be_{0.94}$	1.29(1.44 quenched)		Hex		1057
$Au_{0.08}Be_{0.92}$	1.31		Hex		1057
$Au_{0.15}Be_{0.85}$ (slow cool)	0.91				1057
$Au_{0.15}Be_{0.85}$(arc melted)	2.79		Hex		1057
$Au_{0.3-0.75}Ge_{0.7-0.25}$ (200-600A)	2.7-3.6-2.3				1082▽
$Au_{0.25-0.80}Ge_{0.75-0.20}$ (Deposited ~4K)	2.7-3.6-2.2				1179▽
$Au_{0.5}Ge_{0.5}$ (Deposited ~4K)	3.6				1179▽
Au Na_2			C16	0.06	1377
Au Pb_2	3.10		C16		1377
$Au_{0.1-0.7}Pb_{0.9-0.3}$	7.2-1.5				1100▽
$Au_{1-0}Pb_2Pd_{0-1}$	3.2-3.9-2.7-3.5-3		C16		1377
$Au_{0.30}Pd_{0.033}Te_{0.666}$	2.6		Cub		1116
$Au_{0.167}Pd_{0.166}Te_{0.667}$	4.6		Cub		1116
$Au_{.05}Rh_{.04}Ti_{.91}$	3.0				1060
$Au_{0.25}Sb_{0.75}$	6.7		Cub		1116
Au Th_2	3.65		C16		1377
Au V_3 (Various heat treatments)	2.97,1.84,1.56,~1		A15		1088
Au V_3	<0.015-3.22	HF	A15		1160
B Co_2			C16	0.06	1377

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$B\ Fe_2$			C16	0.06	1377
$B\ Mn_2$			C16	0.06	1377
$B\ Mo_2$	5.07		C16		1377
$B\ Mo_2$	5.85				1105
$B\ Mo_{2(1-x)}Re_{2x}$	5.1-4.3-5.3-5		C16		1377
$B_3Mo_6S_8Sn$ (Composition approximate)	15.0				1309
$B\ Mo_{1.5}Ta_{0.5}$	1.81		C16		1377
$B\ Mo_{1.75}Ta_{0.25}$	3.05		C16		1377
$B_xN_{1-x}Nb$					1238
$B_xN_{1-x}V$					1238
$B\ Ni_2$			C16	0.07	1377
$B\ Re_{2(1-x)}W_{2x}$	4.2-6-3.2		C16		1377
$B\ Ta_2$			C16	0.06	1377
$B\ Ta_{1.5}W_{0.5}$	0.25		C16		1377
$B\ Ta_{1.25}W_{0.75}$			C16	0.06	1377
$B\ Ta_{2-0}W_{0-2}$	<0.2-0.4-<0.2-3.2		C16($x \geq 0.6$)		1377
$B\ W_2$	3.18				1105
$B\ W_2$	3.22		C16		1377
Ba				0.017	1214
Ba				0.014	1233
Ba Hg	2.32-2.29		B2		1232
$Ba_{0.1}Pb_3Sr_{0.9}$	1.75		Tet		1372
Be (~90A)	~ 9				1327▽
Be (condensed) (10K; 260A)	9.6				1178▽
$Be_{0.958}Co_{0.042}$	2.44		A2		1057
$Be_{0.944}Co_{0.056}$	2.48		A2		1057
$Be_{0.944}Co_{0.056}$			$D8_2$	0.45	1057
$Be_{21}Co_5$				0.45	1057
$Be_{0.92}Cu_{0.08}$	0.84		A2		1057
$Be_{0.89}Cu_{0.11}$	1.11		A2		1057
$Be_{0.89}Cu_{0.11}$	0.44				1057
$Be_{0.858}Cu_{0.142}$	0.56		A2		1057

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Be_{0.95}Fe_{0.05}$				0.45	1057
$Be_{0.977}Fe_{0.023}$				0.45	1057
$Be_{0.95}Ir_{0.05}$				0.45	1057
$Be_{21}Ni_5$	0.72,0.78		$D8_2$		1057
$Be_{0.96}Ni_{0.04}$	0.76				1057
$Be_{0.934}Ni_{0.066}$	0.88 (0.66 slow cool)				1057
$Be_{0.9}Ni_{0.1}$	0.58				1057
$Be_{0.9}Ni_{0.1}$	2.38,2.45		A2		1057
$Be_{0.95}Os_{0.05}$	0.57				1057
$Be_{0.95}Pd_{0.05}$				0.45	1057
$Be_{0.95}Pt_{0.05}$				0.45	1057
$Be_{0.95}Re_{0.05}$	9.5				1057
$Be_{0.95}Rh_{0.05}$				0.45	1057
$Be_{0.95}Ru_{0.05}$	1.48				1057
Be Ta_2			C16	0.06	1377
Bi (Condensed at 2K)	6.1				1218▽
Bi (Ne,Xe) Dep. 10K	5.8				1229▽
Bi (~15-15A)	~2-~5°				1259▽
Bi					1264
Bi (0-30 kbar)	~7 (Bi III) ~4, 8.0-8.2				1282
Bi (~1100A; condensed 1.5K)	6.11				1136▽
$Bi_{60w/o}Cd_{40w/o}$	0.53				1204
Bi In_2	5.6	870 ± 10			1198 #
Bi_xIn					1235 ▽
$Bi_{0.025}In_{0.975}$ (0-18 kbar)	4.07 -3.47				1247
Bi_3In_5	~4.2				1112
$Bi_{0.02}In_{0.98}$	3.83				1121
$Bi_{0.0108}In_{0.9892}$ (2000A)		HF			1089▽
$Bi_{0.0043}In_{0.9957}$ (2000A)					1089▽
Bi Li	2.455		$L1_o$		1351
Bi_xPb					1235 ▽
$Bi_{0.3}Pb_{0.7}$	8.63	HF			1318

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Bi_{0.4}Pb_{0.6}$(In porous glass)		HF			1319
$Bi_{0-0.565}Pb_{1-0.435}$		HF			1288
$Bi_{0.56}Pb_{0.44}$ (32A, porous glass)					1045
$Bi_{0.4}Pb_{0.6}$ (32A, porous glass)					1045
$Bi_{0.3}Pb_{0.7}$ (32A, porous glass)					1045
$Bi_{0.1}Pb_{0.9}$	Some data				1126▿
$Bi_{0-0.11}Pb_{1-0.89}$	T_c' (+0.39)				1133
$Bi_{0-0.02}Pb_{1-0.98}$	T_c' (+0.07)				1165
$Bi_{25-63w/o}Pb_{75-37w/o}$					1102
$Bi_{0-0.025}Pb_{1-0.975}Tl_{0-0.025}$	T_c'(-0.01+0.02)				1165
$Bi_{0-0.4}Pb_{1-0}Tl_{0-1}$	7.36-1.2		Cub		1308
$Bi_{0.6}Sn_{0.4}$ (25 katm, metastable)	7.0				1091
Bi Sn (25 katm, metastable)	7.88				1084
$Bi_{0.5}Sn_{0.5}$ (25 katm, metastable)	7.2		Mono		1091
$Bi_{0.4}Sn_{0.6}$ (25 katm, metastable)	7.34				1091
$Bi_{0.009}Sn_{0.991}$	3.700				1153
$Bi_{0.005}Sn_{0.995}$ (2000A)					1089▿
Bi_2Te_3 ($n = 1.5 \times 10^8$)				≈ 2	1280
Bi_2Te_3 (70 - 100 kbar) ($n = 1.5 \times 10^8$)	4.3-3.6				1280
Bi_2Te_3 (65-75 kbar) ($n = 1.5 \times 10^8$)	1.6-3.0				1280
Bi_2Te_3 ($n = 1.5 \times 10^8$) (80 kbar)	2.85				1280
Bi Te_2Tl ($n=6\times10^{20}$)	0.14		Rhomb		1139
$Bi_{0.55-0.62}Tl_{0.45-0.38}$	5.6-6.0				1264
$C_3Ce_{0.2}Th_{1.8}$			$D5_c$	4	1222
$C_3Dy_{0.2}Th_{1.8}$	Magnetic		$D5_c$		1222
$C_3Dy_{0.4}Th$	Magnetic		$D5_c$		1222
C_3Er Th	4.6		$D5_c$		1222
$C_3Er_{1.2}Th_{0.8}$	Magnetic		$D5_c$		1222
$C_3Er_{1.4}Th_{0.6}$	Magnetic		$D5_c$		1222
$C_3Er_{1.6}Th_{0.4}$	Magnetic		$D5_c$		1222
$C_3Er_{0.1}Th_{1.9}$	6.8		$D5_c$		1222

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$C_3Er_{1.8}Th_{0.2}$	Magnetic		$D5_5$		1222
$C_3Er_{0.2}Th_{1.8}$	8.2		$D5_c$		1222
$C_3Er_{0.4}Th_{1.6}$	8.2		$D5_c$		1222
$C_3Er_{0.6}Th_{1.4}$	8.1		$D5_c$		1222
$C_3Er_{0.8}Th_{1.2}$	7.0		$D5_c$		1222
$C_3Gd_{0.2}Th_{1.8}$	Magnetic		$D5_c$		1222
C Hf	Magnetic		$D5_c$		1238
$C_{0.1-0.35}Hf\ N_{0.9-0.65}$	8.5-4.9				1238
$C_{0-1}Hf_{0-1}N_{1-0}Nb_{1-0}$	14.9-15.5-12.7		B1		1238
$C_3Ho_{0.8}Th_{1.2}$	Magnetic		$D5_c$		1222
$C_3Ho_{0.6}Th_{1.4}$	5.2		$D5_c$		1222
$C_3Ho_{0.4}Th_{1.6}$	5.5		$D5_c$		1222
$C_3Ho_{0.2}Th_{1.8}$	5.4		$D5_c$		1222
C_2La				3.9	1148
$C_{1.58}La$	9.6		Cub		1148
$C_{1.35}La$	11.0		Cub		1148
$C_{1.3}La$	4.8		Cub		1148
$C_{1.3}La$	8.3		Cub		1148
$C_{1.45}La_{0.1}Th_{0.9}$	10.2		Cub		1148
$C_{1.45}La_{0.3}Th_{0.7}$	13.4		Cub		1148
$C_{1.45}La_{0.5}Th_{0.5}$	14.2		Cub		1148
$C_{1.5}La_{0.8}Th_{0.2}$	14.1		Cub		1148
$C_{1.35}La_{0.9}Th_{0.1}$	13.7 (11.3 annealed)		Cub		1148
$C_{1.3-1.6}La_{0.9}Th_{0.1}$	12.7-12.9		Cub		1148
$C_{1.2-1.6}La_{0.8}Th_{0.2}$	10.6-14.3		Cub		1148
$C_{1.3-1.5}La_{0.7}Th_{0.3}$	12.3-13.2		Cub		1148
$C_{1.45}La_{0.3}Th_{0.7}$				3.9	1148
$C_{1.45}La_{0.5}Th_{0.5}$	11.1				1148
$C_{1.45}La_{0.1}Th_{0.9}$				3.9	1148
$C_{1.6}La_{0.7}Th_{0.3}$				3.9	1148
$C_{1.8}La_{0.8}Th_{0.2}$				3.9	1148
$C_3Lu_{0.8}Th_{1.2}$	11.6		$D5_c$		1222

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$C_3Lu_{0.6}Th_{1.4}$	11.7		$D5_c$		1222
$C_3Lu_{0.4}Th_{1.6}$	10.9		$D5_c$		1222
$C_3Lu_{0.2}Th_{1.8}$	10.3		$D5_c$		1222
$C_{1-x}Mo$			Hex		1132
$C_{1-x}Mo$					1132
C Mo	14.3		Cub		1036
C Mo		HF	Hex		1098
C Mo_2			Ortho		1132
C Mo_2			Hex		1132
C Mo_2	3.45-5.8		Hex		1132
C Mo_2			Ortho		1132
C $Mo_{\sim 2}$		HF	Hex		1098
$C_{1-0}Mo_{2-0}Re_{0-1}$	2.8-5-1.8		Hex		1366
$C_{0.5}N_xNb$	14.5-17.8				1234
$C_{0.3}N_xNb$	14-17.8				1234
$C_{0.2}N_xNb$	13-17.5				1234
$C_{0.1}N_xNb$	11-17-16				1234
$C_{0.3}N_{0.7}Nb$	17.8				1234
$C_{0.026}N_{0.974}Nb$	17.2-17.3				1234
$C_{0-1}N_{1-0}Nb$		HF	B1		1038
C N Nb		HF			1038
$C_{0.25}N_{0.75}Nb_{0.85}Ti_xZr_{0.15-x}$	17.7-15.5				1238
$C_{0.25}N_{0.75}Nb_{1-x}Zr_x$	17.6-11.5				1238
$C_{0.25}N_{0.75}Nb_{1-x}V_x$	17.6-6.3				1238
$C_wN_xNb_yTi_z$	$\geq$ 17.5				1238
$C_{0.15}N_{0.85}Nb_{0.85}Ti_xZr_{0.15-x}$	17.5-14.7				1238
$C_{0.25}N_{0.75}Nb_{1-x}Ti_x$	17.6-18				1238
$C_{0.25}N_{0.75}Nb_{1-x}Ti_x$	17.6-17.8-16				1238
$C_{0.75-0.70}N_{0.25-0.30}Nb_{0.75-0.70}Ti_{0.25-0.30}$					1238
$C_{0-1}N_{1-0}Nb_{0-1}V_{1-0}$	8.7-8.8-<2.3-11.1		B1		1238
$C_{0-1}N_{1-0}Nb_{1-0}Zr_{0.1}$	14.9-16.3-14.3		B1		1238
$C_{1-0}N_{0-1}Nb_{0-1}Ti_{1-0}$	14.9-17.8-<2.5		B1		1238

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$C_{0-1}N_{1-0}Nb_{0-1}V_{1-0}$	14.9-<2.5		B1		1238
$C_{0-1}N_{1-0}Nb_{1-0}Ta_{0-1}$	14.9-16.5-10.2		B1		1238
$C_{0-1}N_{1-0}Nb_{1-0}$	14.9-18.0-11		B1		1238
$C_{0.25}N_{0.75}Hf_xNb_{1-x}$	17.6-8.5				1238
$C_{0.25}N_{0.75}Hf_xNb_{1-x}$	17.6-12.8				1238
$C_{0-1}N_{1-0}Ta_{0-1}V_{1-0}$	8.7-<2.3-10.0				1238
$C_{0-1}N_{1-0}Ti_{0-1}V_{1-0}$	8.7-<2.3				1238
$C_{0-1}N_{1-0}V$	8.7-9.7-<2.3				1238
C Nb		HF			1035
C Nb	>11	HF			1038
C Nb					1238, 1035
C Nb	7; (11 Annealed); >11	HF			1244, 1038
C_xNb_{1-x}	<2.5-9.6				1345▽
C $Nb_{0.9-0.5}V_{0.1-0.5}$	5.7-<~2				1238
$C_3Nd_{0.2}Th_{1.8}$			$D5_c$	4	1222
$C_3Pr_{0.2}Th_{1.8}$			$D5_c$	4	1222
$C_3Pr_{0.4}Th_{1.6}$			$D5_c$	4	1222
$C_3Sc_{1.4}Th_{0.6}$	5.4				1222
$C_3Sc_{0.8}Th_{1.2}$	6.0		$D5_c$		1222
$C_3Sc_1Th_1$	7.1		$D5_c$		1222
$C_3Sc_{0.8}Th_{1.2}$	7.1		$D5_c$		1222
$C_3Sc_{0.6}Th_{1.4}$	7.2		$D5_c$		1222
$C_3Sc_{0.4}Th_{1.6}$	6.8		$D5_c$		1222
$C_3Sc_{0.2}Th_{1.8}$	6.7		$D5_c$		1222
C Ta					1238
C Ta	10	HF			1244
$C_3Tb_{0.2}Th_{1.8}$	Magnetic		$D5_c$		1222
C_xTh_{1-x}	T_c'(-0.095)	Data given			1291
$C_{1.45}Th$			Cub	3.9	1148
$C_{1.45}Th$	4.1		Cub		1148
C Th				3.9	1148
C Ti					1238

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
C $Ti_{0.4-0.7}V_{0.6-0.3}$				~2	1238
C V					1238
$C_{0.87-0.76}V$					1332 #
$C_{0.87}V$				0.03	1114
$C_{0.84}V$				0.03	1114
$C_{0.81}V$				0.03	1114
$C_{0.76}V$				0.03	1114
C W_2	2.85-3.05		Hex		1223
C W_2	3.05-3.35		Hex		1223
C W_2	2.4-4.05		Ortho		1223
C W_2	3.1-3.90		Ortho		1223
$C_{0.55}W_{0.45}$	8.1		Al		1036
$C_{0.50}W_{0.50}$	10.0		Al		1036
$C_{0.46}W_{0.54}$	9.0		Al		1036
C W			B_h	0.3	1037
C W_2	3.0		Hex		1132
C W_2	3.6		L'_3		1036
C Zr					1238
Ca (99.5%)				0.017	1214
Ca				0.014	1233
Ca Hg	1.6-<1.25		B2		1232
Ca Hg_3	1.6-1.3				1232
Ca Hg_5	1.7-1.5				1232
Ca Pb_3	0.84		$L1_2$		1245
$Ca_{0.6}Pb_3Sr_{0.4}$	1.16		Tet		1245
$Ca_{0.55-0}Pb_3Sr_{0.45-1}$	1.47-1.88		Tet		1245
$Ca_{1-0.7}Pb_3Sr_{0-0.3}$	0.08-1.0		$L1_2$		1245
Ca $Sr_{0-0.3}Pb_3$	0.08-1.0		$L1_2$		1245
Cd	0.52				1166#
Cd					1267
Cd (Deposited <2K)	0.79-0.91(disordered) 0.53-0.59(annealed)				1310▽
Cd	0.52		A3		1340#
Cd_xIn_{1-x}					1184#
$Cd_{0-0.045}In_{1-0.955}$	T'_c(-0.17)				1086,1090

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Cd_{0.50}Mg_{0.50}$			Ortho	0.015	1340#
$Cd_{0.60}Mg_{0.40}$	0.016		Ortho		1340#
$Cd_{0.70}Mg_{0.30}$	0.105				1340#
$Cd_{0.75}Mg_{0.25}$	0.160		Hex		1340#
$Cd_{0.80}Mg_{0.20}$	0.185		Hex		1340#
$Cd_{0.86}Mg_{0.14}$	0.145		Hex		1340#
$Cd_{0.90}Mg_{0.10}$	0.138				1340#
$Cd_{0.96}Mg_{0.04}$	0.24				1340#
$Cd_{1-0.6}Mg_{0-0.4}$	0.52-0.138-0.185-0.016				1340
$Cd_{0.20}Mg_{0.80}$			Hex	0.015	1340#
$Cd_{0.40}Mg_{0.60}$				0.015	1340#
$Cd\ Mo_5S_6$	2.4-2.3		Rhomb		1163
$Cd_{0-0.025}Pb_{1-0.975}$	$T_c'(-0.07)$				1165
Cd_xTl_{1-x}	Data given				1108
Cd_xTl_{1-x}	$T_c'(-0.027)$	Data given			1095
$Cd_{0.2}Zn_{0.8}$	0.628				1052
$Cd_{0.02}Zn_{0.98}$	0.675				
$Cd_{0.002}Zn_{.998}$	0.780				1052
$Ce_{0-0.1}In\ La_{3-2.9}$	9.45-<1	HF			1228
$Ce_{0.04-0.08}In\ La_{2.96-2.92}$	7.2-2.2(0.23 kbar)				1137
$Ce_{0-0.021}La_{1-0.979}$	4.5-2.7	HF			1265
$Ce_{0-0.02}La_{1-0.98}$	4.87-2.4	HF			1358
$Ce_{0-0.02}La_{1-0.98}$	6-2.9				1358
$Ce_{0.01}La_{0.99}$	3.82	730			1365
$Ce\ Os_2$			C14		1375
$Ce_{1-0.80}Tb_{0-0.20}Ru_2$	6.2-6.4-2.4				1113
$Co_{0.98}Cr_{0.02}U$	$T_c'(\sim+0.05)$				1181
$Co_{0.98}Fe_{0.02}U$	T_c' (+0.1)				1181
$Co_{1-0}Fe_{0-1}Zr_2$	5.0-0.2		C16		1377
$Co_{0-0.06}Ga_4Mo_{1-0.94}$	8.0-6.5				1295
$Co_{0.98}Mn_{0.02}U$	T_c' (+0.2)				1181
$Co_{0.92}Mn_{0.08}U_6$	~2.2				1181

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Co_{0.975}Mo_{0.025}U$	T'_c (-0.35)				1181
$Co_{0.98}Ni_{0.02}U$	T'_c (~-0.05)				1181
$Co_xO_yPb_{1-x-y}$(500-700A)	7.2-~2				1053▽
$Co_{0-0.03}Pb_{1-0.97}$ (500-700A)	7.2-4.4				1053▽
$Co_{0.05}Rh_{0.04}Ti_{0.91}$	4.0				1060
$Co_{0.97}Rh_{0.03}U$	T'_c (-0.4)				1181
$Co_{0.96}Mo_{0.04}U_6$	~1.5				1181
$Co_{1-0}Ni_{0-1}Ta_2$	1.2-0.6		C16		1377
$Co_{0.85}Ni_{0.15}Zr_2$	6.0		C16		1355
$Co_{0-1}Ni_{1-0}Zr_2$	5-6.0-1.5-1.6		C16		1355
$Co_{1-0}Ni_{0-1}Zr_2$	5.1-5.9-1.1-1.6		C16		1377
$Co_{0.94}Rh_{0.06}U_6$	~2.0				1181
Co Sc_2			C16	0.07	1377
Co $Sc_{0.125}Zr_{1.875}$	2.89		C16		1372
Co Sn_2			C16	0.07	1377
$Co_{0.02}Sn_{0.98}Ta_3$	4.1	HF			1362
Co Ta_2	0.82		C16		1377
Co $Ta_{1.75}Zr_{0.25}$	0.90		C16		1377
Co U	~1.5				1181
Co U_6	~2.2				1181
Co Zr_2	5.0		C16		1355
Co Zr_2	5.0		C16		1377
$Cr_{0-0.6}Hf\ V_{2-1.4}$	9.2-9.9-9.4				1323
$Cr_xO_yPb_{1-x-y}$(500-700A)	7.2-2.4				1053▽
$Cr_{0-0.008}Pb_{1-0.992}$(500-700A)	7.2-~3				1053▽
$Cr_xPd_{1-x}Sb$	1.66-<0.1				1296
$Cr_{0.62-0.77}Re_{0.38-0.23}$	4.10-1.3				1096#
$Cr_{0.38}Re_{0.62}$	4.10 (3.37 Calorimetric)				1096#
$Cr_{0.05}Rh_{0.04}Ti_{0.91}$	3.75				1060
$Cr_{0.103-0.244}Ti_{0.897-0.756}$	3.85-4.45-3.6		Cub		1289
$Cr_{0.15}Ti_{0.85}$	Various vs Anneals				1290
Cs_xO_3W					1080

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Cr_{0-0.5}V_{2-1.5}Zr$	8.5-8.7-8.2				1323
Cr_xZn_{1-x}	0.85-<0.037	HF			1322
$Cs_xF_{x+y}Li_yO_{3-x-y}W$	3.4-2.0	HF			1242
$Cs_xF_xO_{3-x}W$	4.5-1.4	HF			1242
Cs_xO_3W					1080
Cu					1055
Cr Ge (Deposited ~4K)	1.8-3.3-1.8				1179▽
$Cu_{0.5}Ge_{0.5}$(Deposited ~4K)	3.3				1179▽
$Cu_{.38-.70}Ge_{.62-.30}$ (200-600K)	1.8-3.3-2.0				1082▽
$Cu_4K\ S_3$	1.4		Tet		1374
$Cu_{1.5}Mo_{4.5}S_6$	10.9-10.8		Rhomb		1163
$Cu_3Na_2S_3$	0.3				1374
$Cu_{1-x}Ni_xZr_2$	1.7 (Max.)		C16($x \geq 0.6$)		1377
$Cu_{0.1}Pb_{0.9}$ (Deposited 2K)	6.5				1218▽
$Cu_4Rb\ S_3$			Tet	0.05	1374
$Cu_{0.05}Rh_{0.04}Ti_{0.91}$	2.5				1060
Cu S	1.651 ± 0.005				1354
$Cu\ S_2$	1.56		C2		1130
$Cu_{0.1}Sn_{0.9}$(Deposited 2K)	6.8				1218▽
$Cu\ Th_2$	3.44		C16		1377
$D_{3.61}Th$	~2-8.35				1187
$Eu_{0.012}La_{0.988}$	2.15				1324
$F_{0.12}K_{0.1}Li_{0.02}O_{2.88}W$	1.1				1242
$F_xK_xO_{3-x}W$	1.9-2.1-0.8				1242
$F_{x+y}Li_yO_{3-x-y}Rb_xW$	4.0-2.1	HF			1242
$F_xO_{3-x}Rb_xW$	3.7-0.9	HF			1242
$Fe_{0-0.08}Ga_4Mo_{1-0.92}$	8.0-<1				1295
$Fe_{0-0.04}Ga_4Mo_{1-0.96}$	8.0-4.2	HF			1295
$Fe\ Ge_2$			C16	0.07	1377
$Fe_{0-1}Ni_{0-1}Zr_2$	0.3-2.5-1.6		C16		1377
$Fe_{0-.011}Pb_{1-.989}$ (500-700A)	7.2-2.7				1053▽
$Fe_{0.05}Rh_{0.04}Ti_{0.91}$	3.9				1060
$Fe\ Sn_2$			C16	0.07	1377

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
Fe Sn (Superimposed)	3.15-1.5				1141▽
Fe U_6					1152
Fe Zr_2	0.17		C16		1377
Ga(Deposited 10K)	8.3				1229▽
Ga (β)	5.90				1263#
Ga					1267
Ga (Deposited 4.2K)	6.6				1327▽
Ga (Deposited 4.2K)	8.5				1327▽
Ga (Deposited Low Temp)	6.4-6.8,7.4-8.2				1171▽
Ga (Condensed 1.5K; ~1000A)	8.56				1136▽
Ga (β)	6.4				1122▽
Ga (γ) (Supercooled)	6.9	950			1047
Ga (<100A)	6.72				1062▽
Ga (β) (GaII)	6.0	560			1046
Ga (δ) (Supercooled)	7.85	815			1048
Ga (γ)	7.9				1122▽
$Ga_{1-x}Ge_xNb_3$	16.05-12.2		A15		1072
$Ga_{1-0}Ge_{0-1}V_3$	12-14-6.05		A15		1369
$Ga_{0.8}Ge_{0.2}V_3$	13.6		A15		1073
Ga Hf_2	0.21		C16		1377
$Ga_{0.8}In_{0.2}V_3$	<12 ,12.7 (annealed)		A15		1073
$Ga_{0.03}Mg_{0.97}$				0.013	1340
$Ga_4Mn_{0-0.01}Mo_{1-0.99}$	8-4.0	HF			1295
$Ga_4Mn_{0-0.012}Mo_{1-0.988}$	8-1				1295
Ga_4Mo	8.0	HF			1295
$Ga_4Mo_{1-0.96}Nb_{0-0.04}$	8.0	HF			1295
$Ga_4Mo_{1-0.96}Nb_{0-0.04}$	8.0-8.0				1295
$Ga_4Mo_{1-0.96}Ru_{0-0.04}$	8-7.7				1295
$Ga_{0.19}Nb_{0.81}$	13.3	HF			1339
$Ga_{0.245}Nb_{0.755}$	20.2	HF	A15		1339
$Ga_{0.30}Nb_{0.70}$	16.3	HF			1339
$Ga_{0.32}Nb_{0.68}$	20.2	HF			1339
Ga Nb_3	15.5-12.1,11.5-10.0				1164
Ga Nb_3					1066
$Ga_{0.37}Nb_{0.63}$			Tet	6.0	1190

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Ga_{0.32}Nb_{0.68}$	20.3		A15		1190
$Ga_{0.24}Nb_{0.76}$	20.3		A15		1190
$Ga_{0.215-0.32}Nb_{0.785-0.68}$	20.3-11.0				1190
$Ga_xNb_3Sn_{1-x}$(annealed)	18.0-18.3-16.1		A15		1072
$Ga\ Nb_{2.4}V_{0.6}$	12.5, (13.0 annealed)		A15		1073
$Ga\ Nb_{1.5}V_{1.5}$			A15	12	1073
$Ga_{0.9}Si_{0.1}V_3$	13.7, (14.7 annealed)		A15		1073
$Ga_{0.8}Si_{0.2}V_3$(annealed)	14.8		A15		1073
$Ga_{0-0.3}Si_{1-0.7}V_3$	16.95-12.0,17.0-13.3		A15		1073, 1369
$Ga_{1-0}Sn_{0-1}V_3$	12-3.8		A15		1369
$Ga\ Th_2$			C16	0.06	1377
$Ga_{0.265}V_{0.74}$	15.4 annealed, 14.2 as cast		A15		1343
$Ga_{0.192}V_{0.81}$	9.40,(9.10 as cast)				1343
$Ga_{0.243}V_{0.76}$	15.2, (13.6 as cast)		A15		1343
$Ga\ V_3$	12.0		A15		1369
$Ga\ V_3$	14.6-12.3,11.2-9.9				1164
$Ga\ V_3$	14.4	HF			1075
$Ga\ V_3$	13.65, (14.5 annealed)		A15		1073
Ga_3V					1066
$Ga\ Zr_2$	0.38		C16		1377
$Gd_xIn\ La_{3-x}$	8.5-2.7	HF			1125
$Gd_xIn\ La_{3-x}$			$L1_2$		1065
$Gd_{0-0.006}La_{1-0.994}$	4.5-2.3	HF			1265
$Gd_{0-0.007}La_{1-0.993}$	6-3.2				1358
$Gd_{0-0.005}La_{1-0.995}$	4.87-2.5				1358
$Gd_{0.08}La_{0.92}Sn_3$	4.3	HF			1329
$Gd_{0.067}La_{0.933}Sn_3$	4.6	HF			1329
$Gd_xLa_{1-x}Sn_3$	6.4-<1		$L1_2$		1131
$Gd_{0.002}Th_{0.998}$	0.714	73			1123
$Gd_{0.001}Th_{0.999}$	1.107	123			1123
Ge (115 kbar)	5.35				1068#
$Ge\ Hf_2$			C16	0.05	1377
$Ge_xNb_3Sn_{1-x}$ (annealed)	18.0-18.1-13.2		A15		1072

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Ge_{0.1}Si_{0.9}V_3$	14.4, (16.4annealed)		A15		1073
$Ge_{1-0}Si_{0-1}V_3$	6.05-16.5(Annealed)		A15		1369
$Ge_{1-0}Sn_{0-1}V_3$	6.05-3.8-<3.8		A15		1369
Ge Th_2			C15	0.07	1377
Ge V_3	6.05		A15		1369
Ge V_3	5.9-6.2,6.35-6.25				1164
$H_{0-0.147}Nb_{1-0.853}$	9.30-6.75		Cub		1208
H_xNb_3Sn	4.2-18.2+		A15		1077
$H_xNi_{0.05}Pd$	3-<1.5				1311
$H_xNi_{0.015}Pd$	5.5-<1.5				1311
$H_{0.73}Pd$				1.25	1311
$H_{0.81}Pd$	2.5-<1.5				1311
$H_{0.87}Pd$	4.3-1.7				1311
$H_{3.63}Th$	~2-8.35				1187
$H_{3.6-3.65}Th$	8.05-8.35	HF			1117
$H_{0.32}V_{0.68}$				4.2	1144
Hf (100-700A)				1.3	1273
Hf_2Ir			$E9_3$	1.6	1299
Hf $Mo_{0-0.44}V_{2-1.56}$	9.2-9.3-8.8				1323
Hf N					1238
$Hf_{0-1}N\ Nb_{1-0}$	14.6-5.3	HF	B1		1203
$Hf_{0.1-0.5}Nb_{0.5\ or\ 0.7}$		HF			1092
Hf $Nb_{0-0.5}V_{2-1.5}$	9.2-10-9.5				1323
$Hf_{0.36}Nb_{0.62}Zr_{0.02}$	7.75 (Quenched)				1334
$Hf_{0.36}Nb_{0.62}Zr_{0.02}$	8.1 (aged)				1334
Hf_2Ni	0.87		C16		1377
Hf Re_2	5.2		C14		1149
Hf_2Rh	2.02		$E9_3$		1299
Hf_2Rh	1.98		$E9_3$		1058
Hf Rh	1.73				1058
$Hf_{0.99-0.80}Rh_{0.01-0.20}$	1.3-1.98 (annealed)				1058
$Hf_{0.99-0.80}Rh_{0.01-0.20}$	1.7-2.4-1.98 (quenched)				1058

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Hf_{0.05}Rh_{0.04}Ti_{0.91}$	1.7				1060
Hf_2Si			C16	0.07	1377
$Hf\ Ta_{0-0.5}V_{1-1.5}$	9.2-9.4-9.0				1323
$Hf\ Tc_2$	5.6		C14		1149
$Hf\ V_2$	9.2				1323
$Hf\ V_{2.3}$	9.2		C15		1189
$Hf\ V_2$		HF	C15		1189#
$Hf_{1-0}V_2Zr_{0-1}$	9.2-10.05-8.5				1323
$Hf_{0.5}V_2Zr_{0.5}$	10.1		C15		1189#
Hg ($HgBr_2$ added)$_{0.12}$	3.96-4.06-1.7				1083▽
Hg					1250#
Hg					1267
Hg (In asbestos)					1281
Hg (In asbestos)	4.3	HF			1284
Hg (In NaX Zeolite)					1285
Hg (α)					1067
Hg In	T_c' (-0.07 + 0.03)				1090
$Hg_{1-x}In_x$	T_c' (-)				1097
$Hg\ Mg_2$	0.48-$\underline{0.43}$-0.37				1232
Hg_2Mg_5			Complex	0.3	1232
$Hg\ Mg_3$	0.16		DO_{18}		1232
Hg_3Mg_5	0.48-$\underline{0.44}$-0.33		$D8_8$		1232
Hg Mg	1.39-1.34		B2		1232
Hg_2Mg	4.0-3.4		C11b		1232
$Hg_{0-0.03}Pb_{1-0.97}$	T_c' (-0.06)				1165
$Hg_{0.8-0}Sn_{0.2-1}$	4.5-5.1-3.7				1304
$Hg_{\sim0.1}Sn_{0.99}$	3.646				1153
Hg_xSn_yTl					1108
Hg_xTl_{1-x}					1108
Hg_xTl_{1-x}	T_c' (-0.029)				1095
$Hg_{1-x}Zn_x$	T_c' (-)				1097
In	3.40	283			1140#
In	3.39	264			1074#
In (<100A)	4.13				1062▽

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
In (See Table 3)					
In (1000-100A)	3.5-3.9				1207▿
In					1267
In		HF			1268▿
In	3.50-3.05				1278▿
In (150A particles)	3.7				1349
$In_{0-1}Hg_{1-0}$	3.2-4.6 (quenched) 3.15-4.17 (annealed)				1049
In La_3	9.45				1137
In La_3 (Quenched)	9.0				1065
In La_3	9.2	HF			1125
In_3La			$L1_2$	1.0	1240
$In_{0-0.22}La_{1-0.78}Sn_3$	6.5-<1				1183
$In_{0.18}Mg_{0.82}$			Hex	0.013	1340#
$In_xNb_3Sn_{1-x}$(x=0-0.33)	18-18.05-15.1		A15		1072
$In_{0.03-0.21}Pb_{0.97-0.79}$	7.15-6.90				1225
$In_{0.30-0.80}Pb_{0.70-0.20}$	6.78-5.53	815-610			1260
$In_{0.087}Pb_{0.913}$	7.035,7.042				1269
$In_{1-0.9}Pb_{0-0.1}$	3.39-4.32	264-442			1074#
$In_{1-0.87}Pb_{0-0.13}$		280-565, HF			1029, 1269
$In_{0.96-0.90}Pb_{0.04-0.10}$		HF			1074
$In_{0.955}Pb_{0.045}$	3.69	HF			1140#
$In_{0.95}Pb_{0.05}$	3.73				1140#
$In_{0.945}Pb_{0.055}$	3.83				1140#
$In_{0.22}Pb_{0.57}Sn_{0.21}$		HF			1041
$In_{0-0.11}Pb_{1-0.89}$	T'_c (-0.2)				1133
$In_{0-0.028}Pb_{1-0.972}$	T'_c (-0.085)				1165
In_xPb_{1-x}	Data given				1126▿
In Sb	~3.4	HF	Ortho		1129
In Sb (II)	2.0		Tet		1202
In Sb (III)	4.1 (37,52 kbar)				1202
$In_{0.25}Sb_{0.75}$	4.1		Cub		1116
$In_{0-0.035}Sb_{0-0.035}Sn_{1-0.93}$	0.372-3.66-3.74				1050
$In_{0.2}Si_{0.8}V_3$	16.2,(16.8 annealed)		A15		1073

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$In_{.017-.075}Sn_{.983-.925}$	3.620-4.885				1201
In_xSn					1235▽
$In_{1-0.9}Sn_{0-0.1}$					1258#
$In_{0.06-0.01}Sn_{0.94-0.99}$	3.645-3.625-3.64	HF			1050
$In_{1-x}Sn_x$					1184#
In Th_2			C16	0.07	1377
$In_{1-0}Tl_{0-1}$	3.40-3.2-2.52-3.64-2.33				1270▽
$In_{1-0.96}Tl_{0-0.04}$	3.40-3.27		Tet		1155
$In_{0.96-0.71}Tl_{0.04-0.29}$	3.27-3.19		Tet		1155
$In_{0.73-0.63}Tl_{0.27-0.37}$		HF			1155
$In_{0-0.45}Tl_{1-0.55}$(quenched)	2.9-4.0-2.4				1156
$In_{0.1-0.45}Tl_{0.90-0.55}$	2.9-3.7-2.5				1156
In_xTl_{1-x}					1108
Ir Mo (Disordered)	~1.85		A3		1039
Ir Mo	8.8		B19		1039
$Ir_{1.15}Nb_{0.85}$	4.6		Ortho		1299
$Ir_{1.05}Nb_{0.95}$	4.75		$L1_o$		1299
$Ir_{2.76}Nb\ Pt_{0.24}$			$L1_2$	1.6	1299
$Ir_{2.55}Nb\ Pt_{0.45}$			Hex	1.6	1299
$Ir_{0.45}Nb\ Pt_{2.55}$			DO_{19}	1.6	1299
$Ir_{0-1}Re_{1-0}$ (Deposited 4.2K)	7.5-<1.7				1325▽
$Ir_{1-0.58}Rh_{0-0.42}$	0.103-0.005		A1		1118
$Ir_{0.05}Rh_{0.04}Ti_{0.91}$	4.0				1060
Ir V			$L1_o$	1.36	1299
Ir V			Ortho	1.6	1299
Ir_3V			$L1_2$	4.2	1299
$K_{\sim0.9}Mo\ O_3$				1.3	1212
$K_{\sim0.5}Mo\ O_3$	4.2		Tet		1212
$K_{\sim0.3}O_3Re$	3.6		Hex		1212
$K_{\sim0.9}O_3Re$				1.3	1212
K_xO_3W			Hex		1080
La (11,000-26,000K)	5.06-5.50				1255▽
La		HF			1265

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
La (α)	4.87				1358
La	6.0		A1		1361
La	4.82	1350			1365
La	6.00	1096	A1		1158#
La	6.0		A1		1182#
La (1% rare earths)	T_c' (+0.2→3.4)				1143
La	4.9		Hex		1182#
La	4.87	798	Hex		1158#
$La_{0.91-0.951}Lu_{0.09-0.049}$	3.28,4.37				1255▽
$La_{0.98}Lu_{0.02}$	4.643	HF	Hex		1271
$La_{0.98}Lu_{0.0115}Tb_{0.0085}$	2.582	HF	Hex		1271
$La_{0.98}Lu_{0.01}Tb_{0.01}$	2.108	HF	Hex		1271
La Os_2	5.9		C14		1375
La Os_2	~ 9		C15		1376
La Pb_3	4.05		$L1_2$		1240
$La_{3-2.25}Pr_{0-0.75}$	8.95-1.24		Cub		1154#
La_3S_4	8.06		$D7_3$		1370#
La_2S_3	(Five transitions vs. pressure, temperature)		Cub		1279
La S	0.84		B1		1370#
La S_2			Cub	?	1370
$La_{3-2}Se_{4-3}$ (n = 5.5-1 x 10^{21})	10-1		$D7_3$		1292
La Se	1.02		B1		1370#
La_3Se_4	7.8		$D7_3$		1370#
La $Si_{1.75}$			Ortho	1.2	1353
La $Si_{1.82}$			C_c	1.2	1353
La Si_2			Ortho	1.2	1353
La Si_2	2.3		C_c		1353
La Sn_3	6.45		$L1_2$		1240
La Sn_3	6.41	Data given	$L1_2$		1329
La Sn_3	≃ 6.4		$L1_2$		1131
$La_{0.9}Sn_3Th_{0.1}$	~7				1329
$La_{0.92}Sn_3Tm_{0.08}$	5.2	HF			1329
$La_{0.84}Sn_3Tm_{0.16}$	3.3	HF			1329
La Te	1.48		B1		1370#

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
La_3Te_4	5.3		$D7_3$		1370#
$La_{0-1}Th_{1-0}$	1.28-6.0		Cub		1361#
$La_{0-1}Th_{1-0}$	1.28-6.0		Al		1182#
$La\ Tl_3$	1.57		$L1_2$		1240
La_3Tl (ordered)	8.95		Cub		1154
$La_{0.15}Y_{0.85}$			Hex	0.1	1350#
$La_{0.35}Y_{0.65}$	0.4		Hex		1350#
$La_{0.48}Y_{0.52}$	1.0		α - Sm		1350#
$La_{1-0.6}Y_{0-0.4}$	4.9-1.3		α- La		1350#
$La_{1-0.6}Y_{0-0.4}$	4.9-1.3		Hex		1182#
$La_{0.48}Y_{0.52}$	1.0		(Likeα-Sm)		1182#
$La_{0.35}Y_{0.65}$	0.4		A3		1182#
$La_{0.15}Y_{0.85}$			A3	0.1	1182#
$La_{2.4}Y_{0.6}S_4$	4.77		$D7_3$		1370#
$La_{2.4}Y_{0.6}Se_4$	3.92		$D7_3$		1370#
$La_{2.4}Y_{0.6}Te_4$			$D7_3$	1.7	1370#
Li S				1.0	1191
Li Ti				1.0	1191
$Li_{1.0-1.5}S\ Ti$	2.0 (incomplete)				1191
$Li_{0.5-<1.0}S_2Ti_{1.1}$			Tet	1.12	1191
$Li_{0.1-\leq 0.3}S_2Ti_{1.1}$	10-13		Hex		1191
$Li_{1.33-0.8}Ti_{1.67-2.2}O_4$	1.5-13.7		$H1_1$		1305
Lu S	0.8-1.1		B1		1219
Lu Se	0.44-0.56		B1		1219
Lu Te			B1	0.35	1219
Mg					1166#
Mg	(Predicts T_c = 0.012)				1213#
Mg				0.017	1214
Mg				0.014	1233
Mg			A3	0.004	1340#
$Mg_{0.9}Mo_{5.1}S_6$	2.5-2.4		Rhomb		1163
$Mg_{0.93}Pb_{0.07}$				0.013	1340
$Mg_{0.97}Sn_{0.03}$				0.013	1340

Material	T_c(K)	H_o(oersteds)	Crystal Structure	T_n	Ref
$Mg_{0.85}Tl_{0.15}$				0.013	1340
$Mg_{0.97}Zn_{0.03}$				0.013	1340
$Mn_xO_xPb_{1-x}$ (500-700A)	7.2-1.9				1053▿
Mn_xPb_{1-x}	(T_c decreases)				1054▿
Mn_xPb_{1-x}					1085▿
$Mn_xPd_{1-x}Sb$	1.66-<0.1				1296
$Mn_{.05}Rh_{.04}Ti_{.91}$	2.4				1060
$Mn\ Sn_2$			C16	0.07	1377
Mn_xSn_{1-x}					1085▿
$Mn_ySn_{0.97}Te$	0.187-<0.040				1246
$Mn\ U_6$					1152
Mn_xZn_{1-x}	0.85-0.12	HF			1322
Mo					1267
Mo (>6000-21,000A)	3.3-3.8				1274▿
Mo	0.899,0.906	98			1159
$Mo\ Na_{\sim 0.9}O_3$				1.3	1212
Mo Nb		Data given			1298
Mo Nb (Pressure Study)					1081
$Mo_{0.15}Nb_{0.85}$	5.30	Data given			1298
$Mo_{0.2}Nb_{0.8}$	4.24	Data given			1298
$Mo_{0.1}Nb_{0.9}$	6.38	Data given			1298
$Mo_{0.05}Nb_{0.95}$	7.84	Data given			1298
$Mo_{0-1}Nb_{1-0}$(Deposited 4.2K)	6-9				1325▿
$Mo_{0.05}Nb_{0.95}$	8.0				1157#
$Mo_{\sim 0.2}Nb_{\sim 0.8}$	4.22	HF			1103
$Mo_{\sim 0.15}Nb_{\sim 0.85}$	5.30	HF			1103
$Mo_{\sim 0.1}Nb_{\sim 0.9}$	6.38	HF			1103
$Mo_{\sim 0.05}Nb_{\sim 0.95}$	7.84	HF			1103
$Mo_6Pb_{0.92}S_{7.5}$	15.2		Rhomb		1309
$Mo_{5.1}Pb_{0.9}S_6$	13.2-12.5		Rhomb		1163
$Mo_{3.4}Pt_{0.6}$	8.8		A15		1231
$Mo_{0-0.01}Re_{1-0.999}$	1.69-1.70				1257
$Mo_{0.38}Re_{0.62}$(5000-190,000A)	~9-15				1320▿

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Mo_{1-0}Re_{0-1}$ (Deposited 4.2K)	9-9.5-7.5				1325▿
$Mo_{0.66}Re_{0.34}$	11.8	HF			1331#
$Mo_{0.52}Re_{0.48}$ (annealed)		HF			1151
$Mo_{0.52}Re_{0.48}$		HF			1151
$Mo_{1-0}Ru_{0-1}$ (Deposited 4.2K)	9-9.5-<1.7				1325▿
$Mo_3S\ Se_3$	3.4		Rhomb		1309
$Mo_3S_2Se_2$	3.3		Rhomb		1309
Mo_3Se_4	6.3		Rhomb		1309
Mo_5S_6Sn	11.3-10.9		Rhomb		1163
Mo_5S_6Sn	10.9				1193#
Mo_5S_6Zn	3.0-2.7		Rhomb		1163
$Mo_{0.1}Ti_{0.9}$					1188#
$Mo_{0.05}Rh_{0.04}Ti_{0.91}$	3.3				1060
$Mo_{0.6}Ru_{0.4}$	8.7		Hex		1033
$Mo_{0.15}U_{0.85}$					1152
$Mo_{0.16-0.20}U_{0.84-0.20}$	2.113-2.133				1252
$Mo_{0-0.5}V_{2-1.5}Zr$	8.5-9.1-8.4				1323
$N\ Hf_{0-1}Nb_{1-0}$					1238
N Nb	16		Cub		1196
$N_{0-.186}Nb_{1-.814}$	9.30-8.58		Cub		1208
N Nb		HF			1234
N Nb	2-15.75				1275▿
N Nb	~15	HF	B1		1038
N Nb	16.17-15.48				1107
N Nb	15.95				1079
N Nb	15.0	HF			1044
$N_{0.93}Nb$ (Diffusion wires)	16.5				1070
$N_{0.93}Nb$		HF			1070
$N_{0.85-1.04}Nb$	14.3-16.5-15.7				1070
N Nb (2400A)	14.7	HF			1174▿
N Nb	17.3,15.25	HF			1175▿
$N_{0.998}Nb\ O_{0.002}$	17.2-17.3				1234

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$N_{0.91}Nb_{1-0.75}Ta_{0-0.25}$	16.5-11.3		Cub		1070
$N\ Nb_{1-0}Ti_{0-1}$	14.6-16.5-4.4	HF	B1		1203
$N\ Nb_{\sim 0.5}Ti_{\sim 0.5}$	~15.5	HF			1044
$N_{0.85-0.95}Nb_{1-0.12}Ti_{0-0.88}$	16.2-17.8-10.5		Cub		1070
$N\ Nb_{0.7}Ti_{0.3-x}Zr_x$	17-12.5				1238
$N\ Nb_{1-0}Ti_{0-1}$					1238
$N_xNb_yTi_{1-x-y}$	15.5-~17-5	HF			1344▽
$N_{0.92-0.7-0.93}Nb_{1-0.34}/Zr_{0-0.66}$	16.4-10.5		Cub		1070
$N\ Nb_{1-0}V_{0-1}$	14.6-2-8		B1		1203
$N\ Nb_{1-0}V_{0-1}$					1238
$N\ Nb_{1-0}Zr_{0-1}$					1238
$N_xNb_yZr_{1-x-y}$	~15-9	HF			1344▽
N Ti					1238
N V					1238
N Zr					1238
$Na_{\sim 0.9}O_3Re$			Tet	1.3	1212
Na_xO_3W	0.55				1080
$Na_{0.084}Pb_{0.916}$		HF			1312
$Na_{0.07}Pb_{0.93}$		550,HF			1312
Nb					1197
Nb(4,000-12,000A)	8.20 ± .05 8.97,9.16,9.81				1199▽
Nb (1500-2000A)	8.2-10.1				1206▽
Nb	9.30		A2		1208
Nb	9.21				1209
Nb					1248
Nb (100-1000A)	7.5-9.3				1293▽
Nb					1326 #
Nb (0-2000A)	9.6-6				1328▽
Nb (Deposited 700)	9.3				1345▽
Nb (Deformed)					1347
Nb		HF			1316

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
Nb	9.25	HF			1211
Nb	9.20	HF			1298
Nb (440-1050A)	7.02-8.6	HF			1251v
Nb	9.21	HF			1237
Nb	9.21	HF			1300
Nb	9.23	HF			1359
Nb	9.20	HF			1099#
Nb		HF			1142
Nb		HF			1135
Nb	9.25				1157#
Nb	8.68	HF			1087#
Nb	9.2		A2		1147
$Nb_{1-0.875}O_{0-0.125}$	9.30-7.85		Cub		1208
$Nb\ Os_{0.42}Pt_{2.58}$			DO_{19}	1.6	1299
Nb Pt			B19	1.39	1299
$Nb\ Pt_2$			Ortho	1.46	1299
$Nb\ Pt_{1.8}Ru_{1.2}$			Hex	1.6	1299
$Nb\ Pt_{2.58}Ru_{0.42}$			DO_{19}	1.6	1299
$Nb_{0.65}Pt_3Zr_{0.35}$			DO_{19}	1.6	1299
$Nb_{0.45}Pt_3Zr_{2.55}$			Hex	1.6	1299
$Nb\ Rh_3$			$L1_2$	1.43	1299
$Nb_{1.3}Rh_{2.7}$			Hex		1299
$Nb_{0.75}Rh_{1.25}$	2.7		Mono		1299
$Nb_{0.85}Rh_{1.15}$	3.00		B19		1299
$Nb_{0.9}Rh_{1.1}$	3.07		Ortho		1299
$Nb_{0.96}Rh_{1.04}$	3.76		$L1_o$		1299
$Nb_{0.05}Rh_{0.04}Ti_{0.91}$	2.4				1060
$Nb\ S_2$(See Table 3		HF			
$Nb\ S_2$	6.0		Hex		1192
$Nb\ S_3Sn$	2.75		Tet		1150#
$Nb\ S_2$	5.9				1266
$Nb_3Sb_{0-1}Sn_{1-0}$	18.2-<4.2				1236
$Nb_3Sb_{0-0.3}Sn_{1-0.7}$	18.2-15.8		A15		1236
$Nb_3Sb_{0.3-0.8}Sn_{0.7-0.2}$	15.8-<4.2		A15,s		1236
$Nb_3Sb_{0.8-0}Sn_{0.2-1}$			A15	4.2	1236
$Nb\ Se_2$	7.0	HF			1262
$Nb\ Se_2$	7.1				1266
$Nb\ Se_2$ (0-60 kbar)	6.4-8.8		Hex		1283
$Nb\ Se_2$ (60-100 kbar)	8.9-8.4				1283

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
Nb Se_2	6.95				1317
Nb Se_2(0-17 kbar)	$6.9^{-8.5}$				1321
Nb Se_2	6.8		Hex		1094
$Nb_{0.317-0.343}Se_{0.683-0.657}$	7.0-6.8, 6.8-4.1, 6.8-2.2		Hex		1094
Nb Se_3Sn	3.02		Tet		1150#
Nb_6Sn_5	<2.8				1210
Nb_3Sn	18.2		A15		1236
Nb_3Sn (See Table 3)		HF			
Nb_3Sn	18.25-17.7, 13.9-11.8				1164
$Nb_{0.9-0.6}Sn_{0.1-0.4}$	17.9 (maximum)				1066
$Nb_{0.75-0.84}Sn_{0.25-0.16}$					1093
Nb Sn_3			Tet		1063
Nb_3Sn (Pressure Study)	18.02				1079
Nb_3Sn	18.0	HF			1075
Nb_3Sn			A15		1239
Nb_3Sn	18.0	5350	A15		1253#
Nb_3Sn	17.83		A15		1346#
$Nb_{.75}Sn_{.25}$	18.2				1064
$Nb_{0.8}Sn_{0.2}$	16.7				1064
Nb_xSn_{1-x}					1059
Nb_xSn_{1-x}					1056
Nb_3Sn					1051
Nb_3Sn					1040#
Nb_3Sn		HF			1034
$Nb_{0.75-0.82}Sn_{0.25-0.18}$	18.31-8.2 (vapor deposited)	HF	A15		1167
$Nb_{(1-x)3}Sn\ Ta_{3x}$	17.9-18.1-14.3				1066
$Nb_{(1-x)3}Sn\ Ti_{3x}$	17.9 (maximum)				1066
$Nb_{(1-x)3}Sn\ V_{3x}$	17.9 (maximum)				1066
$Nb_{(1-x)3}Sn\ Zr_{3x}$	17.9 (maximum)				1066
$Nb_{\sim 0.2}Ta_{\sim 0.8}$	4.64	HF			1103
$Nb_{\sim 0.05}Ta_{\sim 0.95}$	4.55	HF			1103

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Nb_{1-0}Ta_{0-1}$	9.18-4.33	150-61.2 ($\frac{10^3}{m}$ Amp)			1307#
$Nb_{0-0.16}Ta_{1-0.84}$	4.480-4.465-4.670	795-882, HF			1356
$Nb_{0.016}Ta_{0.984}$		HF			1356
$Nb_{0.025}Ta_{0.975}$	4.465	800, HF			1356
$Nb_{0.04}Ta_{0.96}$	4.47	817, HF			1356
$Nb_{0.05}Ta_{0.95}$		HF			1330
$Nb_{0.08}Ta_{0.92}$	4.540	882, HF			1356
$Nb_{0.16}Ta_{0.84}$		HF			1356
$Nb_{0.97}Tc_{0.03}$	7.6				1147
$Nb_{0.93}Tc_{0.07}$	7.0		A2		1147
$Nb_{0.69}Tc_{0.31}$			A2	2.0	1147
$Nb_{0.42}Tc_{0.58}$	10.9		A12, A2		1147
$Nb_{0.24}Tc_{0.76}$	12.9		A12		1147
$Nb_{0.06}Tc_{0.94}$			A3		1147
$Nb_{0.03}Tc_{0.97}$	12.8		A3		1147
$Nb_{0.05}Ti_{0.95}$	9.38	HF			1216
$Nb_{.75}Ti_{.25}$	9.93	HF			1241
$Nb_{0.75}Ti_{0.25}$	9.8	HF			1371#
$Nb_{0.9}Ti_{0.1}$	9.2	HF			1371#
$Nb_{.90}Ti_{.10}$	9.61	HF			1241
$Nb_{.95}Ti_{.05}$	9.41	HF			1241
$Nb_{0.95}Ti_{0.05}$	9.2	HF			1371#
Nb_xTi_{1-x}	9-10.3-~5				1344▽
$Nb_{0.15}Ti_{0.40}Zr_{0.45}$		HF			1205
$Nb_{0.18-0.22}U_{0.82-0.78}$	2.009-2.025				1252
$Nb_{1-0}V_{0-1}$	5.17-4.03-9.18	106.3-76.2-150 ($\frac{10^3}{m}$ Amp)			1307#
$Nb_{0-0.5}V_{2-1.5}Zr$	8.5-9.7-9.2				1323
Nb Zr(3000-4000A)	1.6-9.3	HF			1275▽
Nb Zr(Pressure study)	10.75	HF			1301
$Nb_{0.68}Zr_{0.32}$	10.55(10.05 before draw down)				1313
$Nb_{0-1}Zr_{1-0}$(Deposited 4.2K)	3-6				1325▽
$Nb_{0.38}Zr_{0.62}$	8.7				1157#
$Nb_{0.75}Zr_{0.25}$	11.0				1157#
Nb Zr					1081

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Nb_{0.60}Zr_{0.40}$	10.58-10.05-10.75				1333
Nb_xZr_{1-x}	9-~11.5-6				1344▿
$Nb_{0.85}Zr_{0.15}$	10.8				1352#
$Nb_{1-0.75}Zr_{0-0.25}$	9.2-10.8-8.3				1352#
$Ni_{0.05}Rh_{0.04}Ti_{0.91}$	3.5				1060
Ni Ta_2	0.90		C16		1377
Ni Zr_2	1.6		C16		1355
Ni Zr_2	1.58		C16		1377
$O_{(.1)}Pb_{0.9}Si_{(.1)}$ (Dep. 4.2K)	6.5				1218▿
O_3Rb_xW	1.97-1.88		Hex		1080
O_3Rb_xW	6.40-6.14, 6.55-5.45, 2.74-2.36	HF			1080
$O_3Rb_{0.26-0.33}W$	1.6-2.0				1186
O_2Re				1.3	1212
O_2Re				1.3	1212
$O_{1.24}Ti$	2.0				1272
$O_{0.85-1.25}Ti$	<1.3-2.0				1272
$O_{0.86-0.91}Ti$				1.3	1272
$Os_{0-0.08}Re_{1-0.92}$	1.69-1.93-1.88				1257
$Os_{15}Rh_{0.5}$	0.09		Hex		1368
$Os_{0.38-0.33}Rh_{0.62-0.67}$	0.095-0.018		A1		1118
$Os_{0.05}Rh_{0.04}Ti_{0.91}$	3.5				1060
O_3Sr Ti (Pressure study)					1127
$P_{0.4}S_{0.6}Y$			B1	0.36	1219
Pb(~15-100's A)	~2-7.2				1259▿
Pb (Deposited at 2K)	7.2				1218▿
Pb					1250#
Pb					1267
Pb(900, 3300A)	7.26, 7.23	HF			1268▿
Pb		HF			1287
Pb (<100A)	7.22				1062▿
Pb (500-12,000A)		Data given			1124▿
Pb Mo_6S_7	11.1				1193#
Pb Pd_3			$L1_2$	0.10	1372
Pb_2Pd	3.01		C16		1377

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Pb_2Pd_{0-1}Rh_{1-0}$	1.4-2.0-1.7-3.0		C16		1377
$Pb_{2-0}Pd\ Tl_{0-2}$	3.0-1.3		C16		1377
$Pb_{1.9}Rh$	1.32		C16		1377
$Pb_{1-0.99}Sb_{0-0.01}$	T_c' (+0.10)				1165
$Pb_{1-0.95}Sb_{0-0.05}$	T_c' (+0.62)				1133
$Pb_{0.01}Sn_{0.99}$	3.752				1153
$Pb_{1-0.97}Sn_{0-0.03}$	T_c' (+0.04)				1165
$Pb_{1-0.95}Sn_{0-0.05}$	T_c' (+0.07)				1133
Pb_3Sr	1.8		Tet		1245
Pb Te	>10 (Onset)				1341
$Pb_{0.73}Tl_{0.27}$	6.43	760,HF			1200
$Pb_{0.53-0.47}Tl_{0.47-0.53}$	5.637-5.312				1297
$Pb_{1-0}Tl_{0-1}$	~6.3-2.3-2.9-2.4				1348
$Pb_{1-0.98}Tl_{0-0.02}$	T_c' (-0.07)				1165
$Pb_{1-0.89}Tl_{0-0.11}$	T_c' (-0.28)				1133
Pb_xTl_{1-x}	Data given				1126▽
Pb_xTl_{1-x}	Data given				1108
$Pd_{0.5}Rh_{7.5}Zr_{16}$	9.85		C16		1372
$Pd\ Rh_7Zr_{16}$	8.56		C16		1372
$Pd_{0.05}Rh_{0.04}Ti_{0.91}$	3.7				1060
$Pd_{1.5}Ru_{1.5}Ta$			$L1_2$	0.10	1372
$Pd_{0.49-0.52}Sb_{0.51-0.48}$	1.66;1.67-1.42				1296 #
Pd Sb (with additions)					1296
Pd Sb	1.66				1296 #
$Pd_{0.165}Sb_{0.835}$	4.9		Cub		1116
Pd_4Th			$L1_2$	0.10	1372
$Pd\ Th_2$	0.75		C16		1377
$Pd\ Tl_2$	1.32		C16		1377
$Pt_{0.05}Rh_{0.04}Ti_{0.91}$	4.3				1060
Pt_2Ta			Ortho	1.6	1299
$Pt\ Tl_2$	1.58		C16		1377
Pt_3V			$L1_2$	0.07	1372
$Pt_{0.25}V_{0.75}$	2.91, (3.62 annealed)		A15		1177

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Pt_{0.21-0.33}V_{0.79-0.67}$	2.41-2.91-0.199 (quenched) 3.45-3.62-0.208 (annealed)		A15		1177
$Pt_{0.19-0.33}V_{0.81-0.67}$	2.35-3.015-0.199 (quenched) 2.4-3.620-0.225 (annealed)		A15		1177
Re	1.69				1220
Re	1.700	211			1243 #
Re	1.70				1254
Re	1.695				1257
Re (125-4600A)	2.5-4.9 4.6-5.5				1274▽
$Re_{.05}Rh_{.04}Ti_{.91}$	2.3				1060
Re_xTa_{1-x} (Dep. 4.2K)	3.8-7				1325▽
$Re_{1-0}Tc_{0-1}$	(1.699)-2.75-8.35		Hex		1303
Re_2Th	5.0		C14		1149
$Re_{1-0.999}W_{0-0.01}$	1.69-1.725				1257
$Re_{0-1}W_{1-0}$(Dep. 4.2K)	3.5-7.5				1325▽
Re_2Zr	6.4		C14		1149
Rh	0.0002 (Extrapolation)				1118
$Rh_{1-0.55}Ru_{0-0.45}Se_4$	4.3-<0.05		C2		1185#
$Rh_{0.55-0}Ru_{0.45-1}Se_4$				<0.05	1185
$Rh_{.04}Ru_{.05}Ti_{.91}$	3.5				1060
$Rh_{7.75}Ru_{0.25}Zr_{16}$	10.8		C16		1372
$Rh_{7.5}Ru_{0.5}Zr_{16}$	10.6		C16		1372
$Rh_7Ru\ Zr_{16}$	10.1		C16		1372
$Rh_{0.04}Sc_{0.05}Ti_{0.91}$	1.3				1060
$Rh\ Sn_2$	0.60		C16		1377
Rh_2Ta			C37	1.39	1299
$Rh_{0.04}Ta_{0.05}Ti_{0.91}$	2.3				1060
$Rh\ Ti_2$				1.2	1071
$Rh_{0.91}Ti_{0.09}$	2.0				1060
$Rh_{0.1}Ti_{0.9}$	4.0		Cub		1071#
$Rh_{0.08}Ti_{0.92}$	3.5		Cub		1071#
$Rh_{0.06}Ti_{0.94}$	2.6		Cub		1071#
$Rh_{0.04}Ti_{0.96}$	2.0				1060
$Rh_{0.03}Ti_{0.97}$	~1.0		Cub		1071#
$Rh_{0.02}Ti_{0.98}$	1.7		Hex		1071#

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Rh_{0.01}Ti_{0.99}$	~0.9		Hex		1071#
$Rh_{0-0.03}Ti_{1-0.97}$	0.79-1.79-1.34				1109#
$Rh_{.91}Ti_{.04}V_{.05}$	2.9				1060
$Rh_{.91}Ti_{.04}W_{.05}$	3.4				1060
$Rh_{.91}Ti_{.04}Y_{.05}$	1.4				1060
$Rh_{.91}Ti_{.04}Zr_{.05}$	1.8				1060
$Rh\ Zr_2$	11.1		C16		1377
$Rh_{0.08}Zr_{0.92}$	6.1				1061#
$Rh_{0.03-0.08}Zr_{0.97-0.92}$	3.1-6.1				1061#
$Rh_{0.03}Zr_{0.97}$	3.1				1061#
$Rh_{0.01-0.025}Zr_{0.99-0.975}$	2-4				1061#
Ru_2Sc	2.24		C14		1026
$Ru_{0.49}V_{0.51}$				0.4	1119
$Ru_{0.452}V_{0.548}$	4.0				1119
$Ru_{0.40}V_{0.60}$	$\leq$ 1.0				1119
Ru_2Y	2.42		C14		1026
S Sc			B1	0.33	1219
S Se Ta	3.7	HF			1262
$S_{0.8}Se_{1.2}Ta$	3.9	HF			1262
$S_{1.2}Se_{0.8}Ta$	3.9	HF			1262
$S_3Sn\ Ta$	2.90		Tet		1150#
S_2Ta (See Table 3)					
S_2Ta	0.8, (1.0-1.8 after deintercalation)		Hex		1128
S_2Ta	~0.8		Hex		1192
S Ti				1.0	1191
S Y	1.3-1.9		B1		1219
$Sb\ Te_2Tl$			Rhomb	0.015	1139
Sb_2Ti			C16	0.07	1377
Sb_2V			C16	0.06	1377
Sc Se			B1	0.33	1219
Se Y	2.3-2.5		B1		1219
$Se_4\ Y_3$			Ortho	0.35	1370#
Si (120 kbar)	6.70				1068#

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$Si_{1-0}Sn_{0-1}V_3$	16.5-<3.8-3.8		A15		1369
Si $Ta_{1.86}$			C16	0.10	1377
Si V_3	16.95 (17.0 annealed)		A15		1073
Si_xV_{1-x}					1059
$Si_{.25}V_{.75}$	17.0				1064
Si V_3	17.0-15.7, 10.4,8.9				1064
Si V_3					1217#
$Si_{0.205-0.245}V_{0.795-0.755}$	8.5-16		A15		1286
Si V_3	16.8, 16.1				1315#
Si V_3 (Pressure study)			A15, Tet		1342
Si V_3	16.5		A15		1369
SiV_3					1066
$Si_{\sim 3}V$	16.9		A15		1110
Si V_3	16.8, 16.9 (optical measurement)				1101
Si V_3	16.85				1079
Si V_3	16.9	HF			1075
Si Zr_2			C16	0.06	1377
Sn =(Deposited 2K)	4.5				1218▿
Sn (Deposited 2K)	3.6				1218▿
Sn (Ne, Xe)	4.5				1229▿
Sn (~15-40A)	4.2-5.9-4.5				1259▿
Sn					1267
Sn(Whiskers)(1% strain)	4.0(3.5,0 strain)	390(350)			1335
Sn(5400-10,400A)	3.88	HF			1268▿
Sn	3.721				580
Sn	3.720				1153
Sn					1043
Sn (Sn S,Tl_2Se)					1069▿
Sn (<100 A)	4.5				1062▿
Sn Ta_3	5.6	HF			1362
$Sn_{1-0.997}Tl_{0-0.003}$	T_c' (-0.052)				1032
Sn_xTl_{1-x}					1108
Sn V_3	3.8		A15		1369

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
Sr (99.5%)				0.017	1214
Ta (9000-1100A)	4.45, 4.51				1199▿
Ta	4.48				1209
Ta					1230
Ta					1248
Ta (215-110,000A)	<1.7-4.25				1249▿
Ta					1267
$Ta_{1-0.3}Ti_{0-0.70}$	4.48-8.8-7.2				1209
$Ta_{0.68-0.46}Ti_{0.32-0.54}$	8.02-8.26 (annealed) 8.28-9.05 (cold worked)				1209
$Ta_{1-0}V_{0-1}$	4.33-2.73-5.17	61.2-45.6-106.3(10^3 Amp/m)			1307#
$Ta_{0-0.5}V_{2-1.5}Zr$	8.5-9.3-8.8				1323
$Ta_{1-0}W_{0-1}$(Dep. 4.2K)	1.6-3.5				1325▿
Tc (99.75)	8.35				1336
Tc	7.73	1410, HF			1161#
Tc	7.78	HF			1138
Tc		HF			1180
Tc	7.9		A3		1147
Tc	7.46	HF			1180#
Tc	7.77				1161
$Tc_{0.44}Th_{0.56}$	5.3		C14		1149
$Tc_{0.95}V_{0.05}$	10.99	HF			1138
$Tc_{0.90}V_{0.10}$	11.32	HF			1138
$Tc_{0.80}V_{0.20}$	11.24	HF			1138
$Tc_{0.75}V_{0.25}$	11.24, ~7.6	HF			1138
$Tc_{0.7}V_{0.3}$	8.82	HF			1138
$Tc_{0.70}V_{0.30}$	6.41	HF			1138
$Tc_{0.65}V_{0.35}$	4.49	HF			1138
$Tc_{0.6}V_{0.4}$	4.17				1138
$Tc_{0.5-0.2}V_{0.5-0.8}$				1.39	1138
$Tc_{0.1}V_{0.9}$	1.50				1138
$Tc_{0.15-1}W_{0.85-0}$	3.3-10.4-8.35				1337
Tc_2Zr	7.6		C14		1149
Te				0.05	1277
Te (50 kbar)	3.4				1172
Te Y	1.5-2.05		B1		1219
Th					1267

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
Th	1.37	Data given			1291
Th	1.28		A1		1361#
Th	1.28		A1		1182#
Th	1.390	159.1			1123#
$Th_{1-.997}U_{0-0.003}$	1.37-0.5				1226
$Th_{0.99925}U_{0.00075}$	0.785				1227#
$Th_{0.99866}U_{0.00134}$					1227 #
$Th_{0.4-0}Y_{0.6-1}$			Hex	1.2	1361
$Th_{1-0.65}Y_{0-0.35}$	1.28-1.64-1.53		Cub		1361 #
$Th_{1-0.65}Y_{0-0.35}$	1.28-1.64-1.53		A1		1182#
$Th_{0.4-0}Y_{0.6-1}$			A3	1.2	1182#
Th_2Zn	0.67		C16		1377
Ti (100-7000A)				1.3	1273▽
Ti					1071#
Ti					1061#
$Ti_{0.5}Zr_{0.5}$	1.65				1061#
Tl (Ne, Xe)	2.6				1229▽
Tl					1267
Tl	1.75 (Extrapolation for assumed phase)		(A1)		1308
Tl	2.397	176			1378
Tl (P)	2.332	181			1378
Tl	3.0 (extrapolated)		(A1)		1156
Tl	2.49 (extrapolated)		(A1)		1155
Tl					1145
Tl (<100 A)	2.64				1062▽
Tl (S, TlCl, Tl_2Se)					1069▽
$Tl_{1-0.7}Sb_{0-0.3}$	2.905-~5.3-4.198	HF			1378
$Tl_{0.9988}Zn_{0.0012}$	T'_c (+~0.002)				1095
$Tl_{1-x}Zn$	Data given				1108
U	≈ 2.1 (Hypothetical γ phase)				1252
U					1152
V (5000, 11,000)	5.14, 6.02				1199▽
V	5.46				1248
V	5.43	1408,HF			1162
V		HF			1106
$V_{0.06-0.09}Zr_{0.94-0.91}$	7.0-<4.2				1306
V_2Zr	4.2				1306
V_2Zr	8.5		Ortho		1323

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref
$V_{2.3}Zr$	8.6		C15		1189
V_2Zr			C15		1189
W (O_2 content varies)	<1.0-3.2		A15		1042▽
Y			A3	0.08	1182#
Y			Hex	0.08	1350#
Y				0.08	1361#
Y				0.005	1367
$Y_{0.5-0}Zr_{0.5-1}$ (Dep.4.2K)	1.5-3				1325▽
Yb			A1	1.0	1338#
Yb			A3	0.015	1338#
Zn					1256
Zn					1267
Zn (Deposited <2K)	0.31-1.48 (disordered) 0.77-0.84 (annealed)				1310▽
Zn					1061#
Zr					1061#
Zr (100-7000A)	~ 1.3 (>500A)				1273▽

TABLE 3. SUPERCONDUCTIVE MATERIALS WITH ORGANIC CONSTITUENTS

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref.
Al (tetracyanoquinodimethan) Codeposited	1.9-3.7 (annealed) 2.7-5.24 (unannealed)				1078▽
In (anthraquinone) (~5000 A)	3.4-4.6				1076▽
Nb S_2 (ammonia)	2.0		Hex.		1192
NbS_2 (aniline)	4.0		Hex.		1192
Nb_3Sn (carbon dioxide) (carbon monoxide) (methane) (nitrogen) (oxygen)		HF			1168
Nb S_2 (s-collidine)$_{0.17}$	3.5		Hex.		1192
Nb_3Sn (ammonium) (boron trichloride) (ethane) (hydrogen sulfide) (nitrogen oxide) (propane)		HF			1169
Nb S_2 (pyridine)$_{0.5}$	4.0		Hex.		1192
Nb S_2 (tributylphosphine)$_{0.125}$	3.5		Hex.		1192
S SeTa (pyridine)	1.5	HF			1262
S_2Ta (2-aminopyridine)$_{0.53}$	3.25		Hex.		1128
S_2Ta (4-aminopyridine)$_{0.51}$	3.40		Hex.		1128
S_2Ta (ammonia)	4.2		Hex.		1192
S_2Ta (ammonia)	4.2		Hex.		1192
S_2Ta (ammonium acetate)	2.0		Hex.		1192
S_2Ta (ammonium hydroxide)	3.3		Hex.		1192
S_2Ta (amylamine)	2.2				1192
S_2Ta (aniline)	3.1		Hex.		1192
S_2Ta (aniline)$_{0.75}$	3.1		Hex.		1192
S_2Ta (butylamine)	2.5		Hex.		1192

Material	T_c(K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref.
S_2Ta (butyramide)	3.1		Hex.		1192
S_2Ta (cesium hydroxide)	3.8		Hex.		1192
S_2Ta $(s\text{-collidine})_{0.17}$	2.0		Hex.		1192
S_2Ta $(2,6\text{-diaminopyridine})_{0.53}$	3.50		Hex.		1128
S_2Ta $(2\text{-dimethylaminopyridine})_{0.32}$	3.15		Hex.		1128
S_2Ta $(4\text{-dimethylamino-pyridine})_{0.34}$	2.30		Hex.		1128
S_2Ta (N, N-dimethylaniline)	4.3		Hex.		1192
S_2Ta $(2,6\text{-dimethylpyridine})_{0.20}$	2.15		Hex.		1128
S_2Ta (4, 4'-dipyridyl)	2.5		Hex.		1192
S_2Ta (ethylamine)	3.3		Hex.		1192
S_2Ta $(2\text{-ethylpyridine})_{0.29}$	3.0		Hex.		1128
S_2Ta $(3\text{-ethylpyridine})_{0.29}$	4.50		Hex.		1128
S_2Ta $(4\text{-ethylpyridine})_{0.33}$	2.95		Hex.		1128
S_2Ta (hexanamide)	3.1		Hex.		1192
S_2Ta (hydrazine)	4.7		Hex.		1192
S_2Ta $(2\text{-isopropylpyridine})_{0.25}$	3.80		Hex.		1128
S_2Ta $(4\text{-isopropylpyridine})_{0.28}$	2.82		Hex.		1128
S_2Ta (isoquinoline)	2.5		Hex.		1192
S_2Ta (lithium hydroxide)	4.5		Hex.		1192
S_2Ta (methylamine)	4.2		Hex.		1192
S_2Ta $(2\text{-methylpyridine})_{0.34}$	2.95		Hex.		1128
S_2Ta $(3\text{-methylpyridine})_{0.33}$	2.95		Hex.		1128
S_2Ta $(4\text{-methylpyridine})_{0.33}$	2.70		Hex.		1128
S_2Ta (octadecylamine)	3.0		Hex.		1192
S_2Ta (pentadecylamine)	2.8		Hex.		1192
S_2Ta (p-phenylenediamine)	3.3		Hex.		1192
S_2Ta $(p\text{-phenylenediamine})_{0.25}$	2.9		Hex.		1192

Material	T_c (K)	H_o(oersteds)[1]	Crystal Structure	T_n	Ref.
S_2Ta (2-phenylpyridine)$_{0.255}$	3.15		Hex.		1128
S_2Ta (4-phenylpyridine)$_{0.26}$	1.6		Hex.		1128
S_2Ta (potassium formate)	4.7		Hex.		1192
S_2Ta (potassium hydroxide)	5.3		Hex.		1192
S_2Ta (propylamine)	3.0		Hex.		1192
S_2Ta (4-propylpyridine)$_{0.25}$	2.75		Hex.		1128
S_2Ta (2-propylpyridine)$_{0.245}$	2.85		Hex.		1128
S_2Ta (pyridine)$_{0.5}$	3.5		Hex.		1192
S_2Ta (pyridine)$_{0.5}$	3.55		Hex		1128
S_2Ta (pyridine)$_{0.5}$	3.25	HF			1262
S_2Ta (pyridine-N-oxide)	2.5		Hex		1192
S_2Ta (pyridinium chloride)	3.1		Hex.		1192
S_2Ta (quinoline)	2.8		Hex.		1192
S_2Ta (rubidium hydroxide)	4.3		Hex.		1192
S_2Ta (septadecylamine)	2.7		Hex.		1192
S_2Ta (sodium hydroxide)	4.8		Hex.		1192
S_2Ta (stearamide)	3.1		Hex.		1192
S_2Ta (tetradecylamine)	2.4		Hex.		1192
S_2Ta (N, N, N', N'-tetra-methyl-p-phenylene-diamine)	2.9		Hex.		1192
S_2Ta (thiobenzamide)	3.3		Hex.		1192
S_2Ta (tributylamine)	3.0		Hex.		1192
S_2Ta (tributylphosphine)$_{0.125}$	2.0		Hex.		1192
S_2Ta (tridecylamine)	2.5		Hex.		1192
S_2Ta (2, 4, 6-trimethyl-pyridine)$_{0.165}$	1.95		Hex.		1128
S_2Ta (triton B)	5.0		Hex.		1192
S_2Ta (valeramide)	2.9		Hex.		1192
$S_2Ta_{0.8}W_{0.2}$(s-collidine)$_{0.17}$	2.0		Hex.		1192
$S_2Ta_{0.3}W_{0.7}$(s-collidine)$_{0.17}$				~0.4	1192
S_2Ti (ammonia)			Hex.	0.3	1192
S_2Ti (aniline)			Hex.	0.3	1192
S_2Ti (s-collidine)$_{0.17}$			Hex.	0.3	1192
S_2Ti (pyridine)$_{0.5}$			Hex.	0.3	1192
S_2Ti (tributylphosphine)$_{0.125}$			Hex.	0.3	1192
S_2Zr (ammonia)			Hex.	0.3	1192

TABLE 4. HIGH MAGNETIC FIELD (TYPE II) SUPERCONDUCTIVE MATERIALS AND SOME OF THEIR PROPERTIES

(Note: All fields are quoted in kilo-oersteds. T_{obs} indicates temperature of measurement in degrees Kelvin)

Material	T_c	H_{c1}	H_c	H_{c2}	H_{c3}	T_{obs}	Ref.
Al (<40-1000A)	3.74-<1.26			⊥ >12 ∥ >23		0 0	1294▽
$Al_{0.5}Ga_{0.5}Nb_3$	19.0			310 316		4.2 0	1339
$AlGd_{0-0.009}La_{3-x}$	5.97-<1			27		0	1364
$Al_2Gd_{0-0.004}La_{1-0.996}$	3.20-1.52			3.2-0.45		0	1262
$Al_{0.16}Ge_{0.05}Nb_{0.79}$	20.7			410 439		0	1339
$Al_{0.8}Ge_{0.2}Nb_3$ (5000A.)	16.0			>210		4.2	1174▽
Al Nb_3	18.1			Data given			1075
Al Nb_3	18.6			295 330		4.2 0	1339
Au V_3	<0.015-3.22			Data given			1160
$Bi_{0.0108}In_{0.9892}$(2000A.)				Data given			1089▽
$Bi_{0.0043}In_{0.9957}$(2000A.)							1089▽
$Bi_{0.56}Pb_{0.44}$(Porous glass; 32A)				178 113		0 4.2	1045
$Bi_{0.4}Pb_{0.6}$(Porous glass; 32A)				186 125		0	1045
$Bi_{0.3}Pb_{0.7}$(Porous glass; 32A)				95		4.5	1045
$Bi_{25-63 w/o}Pb_{75-37 w/o}$				I_c vs H given			1102
$Bi_{0.3}Pb_{0.7}$	8.63			35		0	1318
$Bi_{0.4}Pb_{0.6}$(porous glass				110,96		4.2	1319
$Bi_{0-0.565}Pb_{1-0.435}$				0.6->16	0-<15	?	1288
$Bi_{0.6}Sn_{0.4}$(metastable)	7.0			4.50		4.2	1091
$Bi_{0.5}Sn_{0.5}$(metastable)	7.2			4.7		4.2	1091
$Bi_{0.4}Sn_{0.6}$(metastable)	7.34			5.35		4.2	1091
$Bi_{0.005}Sn_{0.995}$(2000A)				Data given			1089▽
Bi Te_2Tl (n = 6 x 10^{20})	0.14			0.010		0	1139

Material	T_c	H_{c1}	H_c	H_{c2}	H_{c3}	T_{obs}	Ref.
$C_{\sim0.5}Mo_{\sim0.5}$				52		4.2	1098
$C\ Mo_{\sim2}$				30 8 (after 1400°C, ½ hour)		4.2 4.2	
$C_{0-1}N_{0-1}Nb$				80-125-13		4.2	1038
C N Nb				67		4.2	1038
C Nb	>11°K			13		4.2	1038
C Nb				7 11 (annealed)		4.2 4.2	1244
C Ta	10			1.6 4.4(annealed)		4.2	1244
$Ce_{0-0.1}In\ La_{3-2.9}$	9.45-<1			71-0		0	1228
$Ce_{0-0.021}La_{1-0.979}$	4.5-2.7			Data given			1265
$Ce_{0-0.02}La_{1-0.98}$	4.87-2.4	0.33-0.14	0.80-0.32	Data given		0	1358
$Co_{0.02}Sn_{0.98}Ta_3$	4.1			Data given			1362
Cr_xZn_{1-x}	0.85-<0.037			Data given			1322
$Cs_xF_{x+y}Li_yO_{3-x-y}W$	3.4-2.0			6.9-4.3		0	1242
$Cs_xF_xO_{3-x}W$	4.5-1.4(x=0.08-0.30)			9.0-4.0		0	1242
$F_{x+y}Li_yO_{3-x-y}Rb_xW$	4.0-2.1			6.2-4.8		0	1242
$F_xO_{3-x}Rb_xW$	3.7-0.9(x=0.08-0.30)			8-9.4-5.9		0	1242
$Fe_{0-0.04}Ga_4Mo_{1-0.96}$	8.0-4.2			74-37		0	1295
$Ga_4Mn_{0-0.01}Mo_{1-0.99}$	8-4.0			74-25		0	1295
Ga_4Mo	8.0			73.7		0	1295
$Ga_4Mo_{1-0.96}Nb_{0-0.04}$	8.0			74-78		0	1295
$Ga_{0.19}Nb_{0.81}$	13.3			133		4.2	1339
$Ga_{0.245}Nb_{0.755}$	20.2			341(calculated)		0	1339
$Ga_{0.30}Nb_{0.70}$	16.3			199 220(calculated)		4.2 0	1339
$Ga_{0.32}Nb_{0.68}$	20.2			336		4.2	1339

Material	T_c	H_{c1}	H_c	H_{c2}	H_{c3}	T_{obs}	Ref.
Ga V_3	14.4			Data given			1075
$Gd_xIn\ La_{3-x}$							
where x = 0.0064	8.5			52		2	1125
0.0148	7.9			40		2	
0.0340	6.8			14		2	
0.0396	6.0			5.4-7.4-0 (vs. T_{obs})			
0.0496	5.0			2.8-3.6-0			
0.0596	4.3			1.7-2.1-0			
0.0640	3.4			1.0-1.05-0			
0.0732	2.7			0.6		0.3	
$Gd_{0-0.006}La_{1-0.994}$	4.5-2.3			Data given			1265
$Gd_{0.08}La_{0.92}Sn_3$	4.3			0.60		0	1329
$Gd_{0.067}La_{0.933}Sn_3$	4.6			0.70		0	1329
$Hf_{0.1}N\ Nb_{1-0}$	14.6-5.3			135-10		4.2	1203
$H_{3.6-3.65}Th$	8.05-8.35			25-30		1.1	1117
$Hf_{0.1-0.5}Nb_{0.5\ or\ 0.7}Ti_{0.06-0.30}$ $Zr_{0.06-0.30}$				Data given			1092
Hf V_2				200		4.2	1189
$Hf_{0.5}V_2Zr_{0.5}$	10.1			~230		4.2	1189
Hg (in asbestos)	4.3			30->70		0	1284
In				Data given			1268
In La_3	9.2			61		2	1125
$In_{1-0.87}Pb_{0-0.13}$			280-565	Data Given			1029
$In_{0.96-0.90}Pb_{0.04-0.10}$		0.11-0.10	0.10-0.18	0.11-0.39	0.23-0.77	T/T_c=0.8	1074
$In_{0.955}Pb_{0.045}$	3.69	0.311	0.353	0.431		0	1140
$In_{0.95}Pb_{0.05}$	3.73	0.318	0.375	0.492		0	1140
$In_{0.945}Pb_{0.055}$	3.83	0.303	0.386	0.602		0	1140
$In_{0.22}Pb_{0.57}Sn_{0.21}$				4.8		2.0	1041
In Sb	~3.4			Data given			1129

Material	T_c	H_{c1}	H_c	H_{c2}	H_{c3}	T_{obs}	Ref.
$In_{0.06-0.01}Sn_{0.94-0.99}$	3.645-3.625-3.64			Data given			1050
$In_{0.73-0.63}Tl_{0.27-0.37}$				0.275-0.350		2.15	1055
La				8-10.8		1.4	1265
$La_{0.98}Lu_{0.02}$	4.643				11.5	0	1271
$La_{0.98}Lu_{0.0115}Tb_{0.0085}$	2.582				1.38	0	1271
$La_{0.98}Lu_{0.01}Tb_{0.01}$	2.108				0.82	0	1271
$La_{0.92}Sn_3Tm_{0.08}$	5.2			Data given			1329
$La_{0.84}Sn_3Tm_{0.16}$	3.3			Data given			1329
Mn_xZn_{1-x}	0.85-0.12			Data given			1322
$Mo_{\sim 0.2}Nb_{\sim 0.8}$	4.22	0.15	0.50	2.99		2.39	1103
$Mo_{\sim 0.15}Nb_{\sim 0.85}$	5.30	0.16	0.46	2.47		3.77	1103
$Mo_{\sim 0.1}Nb_{\sim 0.9}$	6.38	0.29	0.785	4.14		3.78	1103
$Mo_{\sim 0.05}Nb_{\sim 0.95}$	7.84	0.49	1.07	4.265		4.17	1103
$Mo_{0.52}Re_{0.48}$ (Annealed)		0.613		16.2		1.16 5.40	1151
(Unannealed)		0.836		20.1		1.94	
$Mo_{0.66}Re_{0.34}$	11.8	0.381		11.34		4.2	1331
N Nb (with O_2)				118-132		4.2	1234
NNb	15.0			~250		0	1044
$N_{0.93}Nb$		0.008				15.8	1070
N Nb (2400A)	14.7			>250		4.2	1174▽
N Nb. (Reactive sputtering)	17.3			~200		4.2	1175▽
N $Nb_{\sim 0.5}Ti_{\sim 0.5}$	~15.5			$\lesssim$250		0	1044
N $Nb_{1-0}Ti_{-.1}$	14.6-16.5-4.4			135-145-5		4.2	1203
$N_xNb_yTi_{1-x-y}$	15.5-~17-5			<200		4.2	1344▽
$N_xNb_yZr_{1-x-y}$	~15-9			~200			1344▽
$Na_{0.084}Pb_{0.916}$				Data Given			1312

Material	T_c	H_{c1}	H_c	H_{c2}	H_{c3}	T_{obs}	Ref.
Nb				Data given			1316
Nb (RRR 16,500)	9.25			H_{c3}/H_{c2} given			1211
Nb	9.20			Data given			1298
Nb (440,1050A)	7.02-8.6	0.011-19		20-32			1251
Nb(RRR 100-830)	9.21			2.77-3.8 (vs purity and orientation)		4.2	1237
Nb(RRR 100)	9.21			3.92-4.16 (vs orientation)		1.5	1300
Nb (RRR ~1000)	9.23			4.035		0	1359
Nb				// [111] ,4.44		0	1142
				// [110] ,4.17		0	
				// [001] ,4.02		0	
Nb	8.68			~8			1087, 1135
Nb	9.20	1.85		3.9		0	1099
Nb S_2(See Table 3, V-1)							
Nb Se_2	7.0			$\perp$ 22,20 // 74,71		4.2 4.2	1262
Nb_3Sn(See Table 3, V-1)							
Nb_3Sn	18.0			Data given			1075, 1034
$Nb_{0.75-0.82}Sn_{0.25-0.18}$ (Vapor deposit)	18.31-8.2			225		4.2	1167
$Nb_{\sim 0.2}Ta_{\sim 0.8}$	4.64	0.1				4.19	1103
$Nb_{\sim 0.05}Ta_{\sim 0.95}$	4.55	0.08				4.19	1103
$Nb_{0-0.16}Ta_{1-0.84}$	4.480-4.465-4.670	Data Given	0.795-0.882	Data Given			1356
$Nb_{0.016}Ta_{0.984}$				0.847		0	1356
$Nb_{0.025}Ta_{0.975}$	4.465	0.773	0.800	0.99		0	1356
$Nb_{0.04}Ta_{0.96}$	4.470	0.772	0.817	1.17		0	1356
$Nb_{0.05}Ta_{0.95}$ (deformed)					0.23-0.39	4.19	1330
$Nb_{0.08}Ta_{0.92}$	4.540	0.768	0.882	1.78		0	1356
$Nb_{0.16}Ta_{0.84}$				2.98		0	1356
$Nb_{0.05}Ti_{0.95}$	9.38			19.1		0	1216

Material	T_c	H_{c1}	H_c	H_{c2}	H_{c3}	T_{obs}	Ref.
$Nb_{0.75}Ti_{0.25}$	9.93	0.35		90.5		0	1241
$Nb_{0.75}Ti_{0.25}$	9.8			100 73		0 4.2	1371
$Nb_{0.9}Ti_{0.1}$	9.2			37 36		0 4.2	1371
$Nb_{0.90}Ti_{0.10}$	9.61	0.50		35		0	1241
$Nb_{0.95}Ti_{0.05}$	9.41	0.675		18		0	1241
$Nb_{0.95}Ti_{0.05}$	9.2			19.5 16.5		0 4.2	1371
$Nb_{0.15}Ti_{0.40}Zr_{0.45}$				I_c data given			1205
Nb Zr (3000-4000 A)	1.6-9.3			I_c data given			1275
Nb Zr	10.75			H_{c2} changes with P			1301
O_3Rb_xW	6.40-6.14 6.55-5.45 2.84-2.36			Data given		4.19	1080
Pb (900-3300 A)	7.26			Data given			1268▽
Pb					Data given		1287
S Se Ta	3.7			$\perp$ 9,11 // 54,74		2.2 2.2	1262
$S_{0.8}Se_{1.2}Ta$	3.9			$\perp$ 10.4 $\perp$ 6.7 // 45		2.34 2.9 2.9	1262
$S_{1.2}Se_{0.8}Ta$	3.9			$\perp$12,13 //75,92		2.34 2.34	1262
S Se Ta (Pyridine)	1.5			$\perp$ 2.6 // 19.1		1.1 1.1	1262
S_2Ta (Pyridine)$_{0.5}$	3.25			$\perp$ 4.9 $\perp$ 1.4 // >150 // > 66		1.4 2.0 1.4 2.0	1262
Sn (5400, 10,400 A)	3.88-3.90			Data given			1268▽
Sn Ta_3	5.6			Data given			1362

Material	T_c	H_{c1}	H_c	H_{c2}	H_{c3}	T_{obs}	Ref.
Si V_3	16.9			Data given			1075
Tc		1.02	1.55	4.17		0	1180
Tc (⟨$10\bar{1}0$⟩sample)	7.46	1.16	1.55	3.12		0	1180
Tc	7.78			2.33		0	1138
Tc	7.73		1.41	2.46		0	1161
$Tc_{0.95}V_{0.05}$	10.99			35.5		0	1138
$Tc_{0.90}V_{0.10}$	11.32			43.3		0	1138
$Tc_{0.80}V_{0.20}$	11.24			42.3		0	1138
$Tc_{0.75}V_{0.25}$(Lower annealing temp.)	11.07			23.7		0	1138
$Tc_{0.75}V_{0.25}$	11.24			34.8		0	1138
$Tc_{0.7}V_{0.3}$(Lower annealing temp.)	8.82			14.0		0	1138
$Tc_{0.7}V_{0.3}$	6.41			31.7		0	1138
$Tc_{0.65}V_{0.35}$	4.49			21.4		0	1138
$Tl_{1\text{-}0.7}Sb_{0\text{-}0.3}$	2.905-~5.3-4.198	0.18-0.46-0.29		0.86-~7.3-3.9		0	1378
V	5.43		1.408	2.68		0	1162, 1106
V_2Zr				103		4.2	1189

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16. ABSTRACT *(A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)*
This report includes data on additional superconductive materials extracted from a portion of the world literature up to mid-1973. The data presented are new values and have not been selected or compared to values (except for selected values of the elements) previously assembled by the Superconductive Materials Data Center. The properties included are composition, critical temperature, critical magnetic field, crystal structure and the results of negative experiments. Special tabulations of high magnetic field materials with Type II behavior and materials with organic components are included. All entries are keyed to the literature and a list of reviews centered on superconductive materials is included.

17. KEY WORDS *(six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons)* Bibliography;composition; critical fields; critical temperature; crystallographic data; data compilation; low temperature; superconductive materials; superconductivity.

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